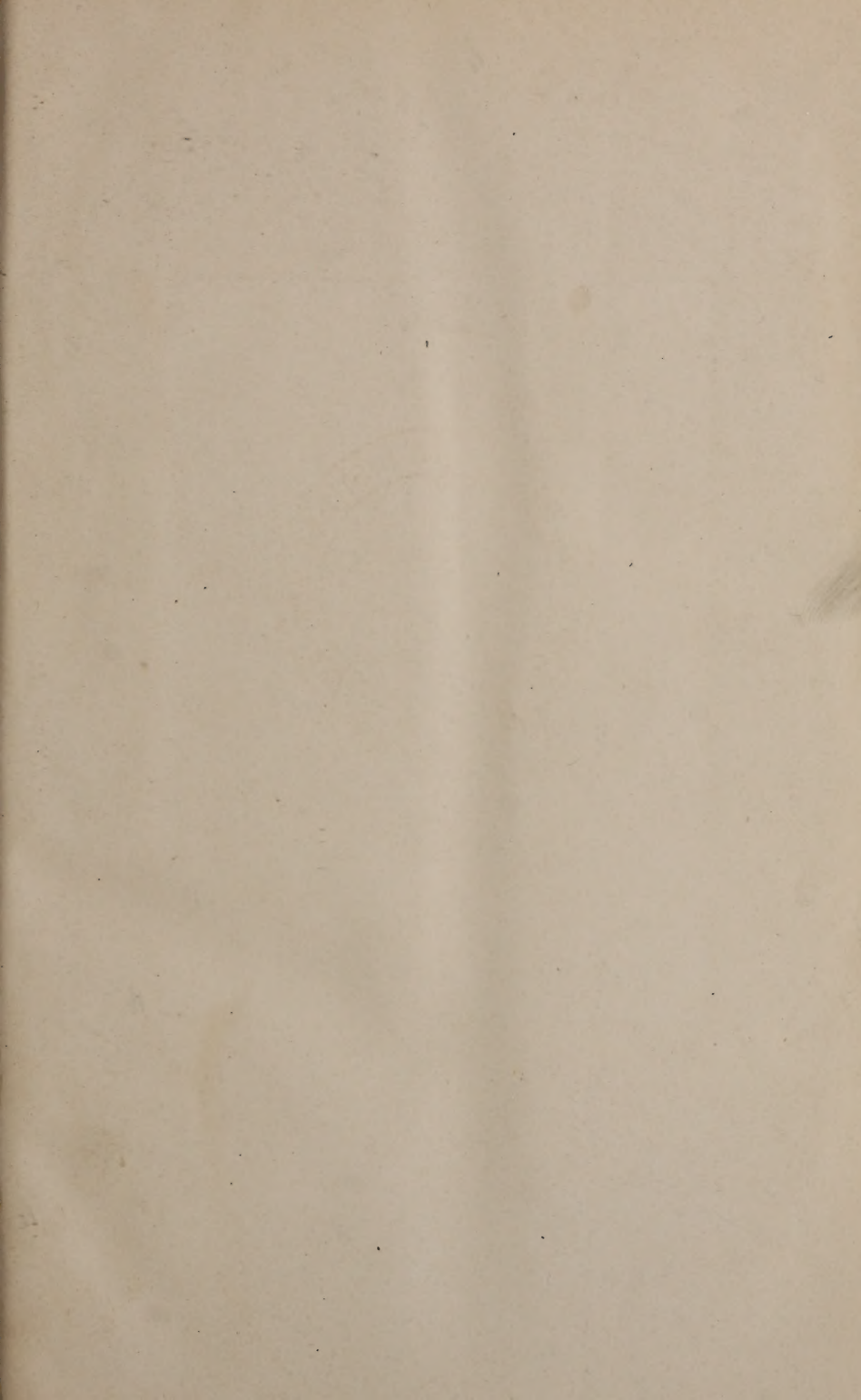


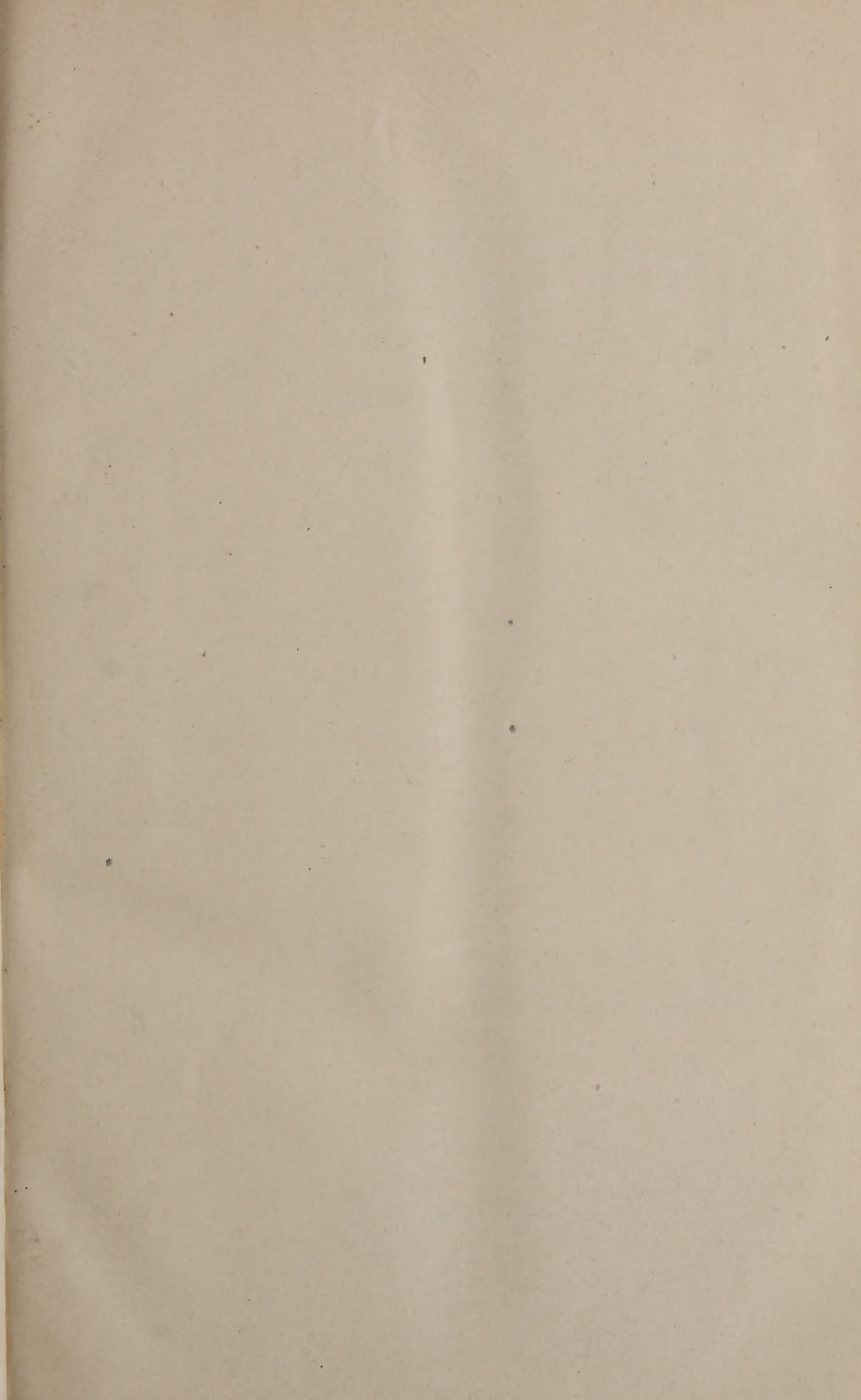
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VIRGINIA



MEDICAL MONTHLY.

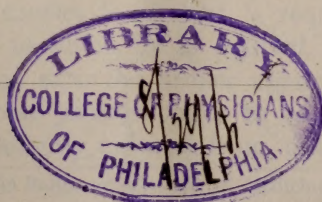
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(From April, 1884, to March, 1885, inclusive.)

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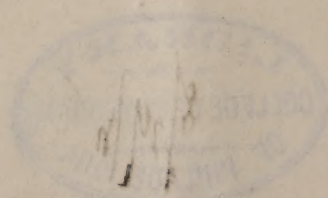
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RICHMOND, APRIL, 1884.

Original Communications.

ART. I.—How to Shrink Hypertrophied Tonsils by Caustic Applications.* By JULIAN J. CHISOLM, M. D., Professor of Eye and Ear Diseases in the University of Maryland; Surgeon in charge of the Presbyterian Eye, Ear and Throat Charity Hospital, etc., Baltimore, Md.

Before entering into the discussion of how to destroy enlarged tonsils by caustic applications, I would say that I unhesitatingly prefer excision of the enlarged gland in every case in which the patient will permit the use of the knife. It is by far the quickest, surest and best means of securing permanent and complete relief, especially when at least one-half of the hypertrophied gland is recovered by one application of the tonsillitome.

I have never seen the propriety of taking a shaving from the large throat lump, and renewing this from time to time till a number of operations have been scored. Such a course looks like abuse of professional confidence, to say nothing of the lack of judgment, making repeated wounds in the throat with the accompanying soreness which is thereby kept up when one cut surface is all that is required to give the patient the relief to which he is entitled. When one raw surface is cicatrized after the proper application of the tonsillitome, the throat passage ought to be well opened, and the patient permanently relieved from the necessity of ex-

*Paper read before the Baltimore Academy of Medicine.

posure to a second week of sore throat, which made the taking of food anything but a pleasure. To renew this painful experience from time to time because enough of the hypertrophic tonsil had not been removed at the first sitting is cruel.

In my personal experience of tonsil cutting (and I have taken off a great many), I have never seen any trouble from hæmorrhage. In fact, I have never seen any bleeding which gave me any anxiety whatever. Cases have been reported in which very alarming hæmorrhage had taken place, but this must ever be a rare accident at the hands of a skillful and cautious operator, who restricts the application of the tonsillitome to simple hypertrophies of the tonsil, and is careful how he cuts the more complex or malignant changes in the gland.

The object of this paper is not to tell you that hypertrophic tonsils should be cut out; every physician is thoroughly aware of this clinical fact. But suppose that a patient positively refuses to permit any cutting instrument to be used, what are we then to do? Such cases occur very frequently in the experience of every physician. Timid parents will not accept for their suffering children the quick, certain and permanent relief which excision offers. At the same time they will request that treatment be instituted to relieve their children from the exposure to suffocative attacks and constant annoyances in breathing, eating and speaking, to which these little sufferers are forced to submit. Large lumps in the throat, at all times a discomfort, swelling up under irritation, till they touch at the uvula, and threaten to cut off communication with the chest and abdomen, must be a serious disturbing influence in sustaining health. Undeveloped bodies, with pallid faces, must be the result of this diseased state of the throat, nor is this condition of short duration. Chronic hypertrophy of the tonsil may show itself at a very early age of childhood, and usually continues up to, and even after puberty.

Without judicious treatment this diseased condition of the throat will continue at least during the growing period of the individual, and may possibly entail upon such patients

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defective hearing in addition to other annoyances. Nature, unaided, will do but little to bring about the desired relief of causing absorption of these hypertrophied glands. A general medical treatment may do much to sustain a comparatively healthy state. Proper hygiene, fresh air, warm clothing, protection from exposure, nutritious food, with general attention to the digestive apparatus, when aided by the internal administration of cod liver oil and iron, will do much toward improving the throat. When such treatment is instituted early enough, it will fortunately often prove successful.

I have seen no benefit from the administration of so-called absorbents, or remedies which, when taken into the circulation, are supposed to act more immediately upon the glandular system, viz.: Iodide of potash, iodide of ammonium, muriate of ammonia, guaiacum, etc. These, on the contrary, when given for a length of time often disturb the digestion, and are so extremely uncertain in their shrinking action as to be of very questionable utility in removing tonsillar hypertrophies.

Nearly as much can be said of the negative results of astringents locally applied to the surface of hypertrophied tonsils to cause absorption. Such as painting the inner surface of the throat with iodine preparations, tincture of iron, glycerole of tannin, solutions of nitrate of silver, or the frequent gargling with solutions of alum, tannin, borax, muriate of ammonia, chlorate of potash, etc. However valuable such local applications may have proved themselves in many throat affections, they are little more than placebos when used for shrinking hypertrophies of the tonsil. We have all seen cases in which some of these remedies have been assiduously applied for months with no material benefit in the permanent reduction of the throat lumps. These continue to annoy as if no local treatment had been instituted.

The local application of destructive agents alone promise no satisfactory reduction. Among the true caustics are the strong mineral acids, nitric and muriatic acids, chromic acid, chloride of zinc, London paste, which is caustic soda and lime, Vienna paste, a caustic potash of lime, etc. These are usually applied to the surface of the tonsil. They are

often violent in their action, difficult to limit to the tonsil proper, and by excoriating the mucous surface to which they come in contact usually make a very painful sore throat for the patient. These destructive applications require frequent repetition, at intervals of one or two weeks, until the enlarged gland is eaten away, as it were, by piece-meal. It is not surprising that patients suffering with hypertrophied tonsils, especially the young children, who are in such a large majority, shrink from this painful ordeal.

When the knife is not used, we must look to these caustics to effect the removal of enlarged tonsils; but there seems to me a much better method of applying these than to the exposed surface of the throat, where the good they accomplish is accompanied by so much positive discomfort. If we will utilize our knowledge of the anatomy of the tonsil, much light can be thrown upon this important subject, and a comparatively painless solution of these stubborn throat lumps can be obtained.

The tonsil is a very spongy gland full of holes. It is made up of infoldings of mucous membrane, by which crypts, follicles, or flask-shaped cavities are formed, with outlets upon the inner surface of the throat. In viewing the hypertrophied tonsil small round depressions seem to honeycomb the surface. As many as fifteen or twenty can be counted. A probe will enter these open mouths without impediment, and will sink down into the innermost depths of the gland. These convolutions, if they may be so called, increase immensely the surface of the tonsil. Such crypts are lined with lymphoid follicles and epithelial cells. This lining membrane is much more delicate and destructible than that covering the exposed faucial surface of the gland.

In chronically enlarged tonsils, whether due to hypertrophy of the stroma or connective tissue of the organ, or to enlargement of the follicular structure, the epithelial elements of the follicles, the crypts and their outlets are not obliterated. In follicular hypertrophy the enlarged gland seems irregularly nodulated. The open mouths of the follicles are also enlarged and rendered conspicuous by tenacious exuding secretions. When the connective tissue elements are

increased, the swelling would be firmer and more smoothly rounded, with shrunken follicles, but they still exist, although much contracted.

In the distribution of sensitive nerves, the exposed surfaces receive the larger supply according to rule, and the interior surfaces of the follicles are to a certain extent deficient in common sensation. Here, then, we have in these deep pits a much more 'extended, less sensitive and more easily influenced surface, to which destructive agents can be readily applied without annoying the throat proper. Caustics, if burried in the substance of the tonsil, will soon give evidence of the much desired shrinkage.

Among the various caustics for local use in causing shrinkage of tonsillar hypertrophies, I have found the chloride of zinc the most available and the least annoying to the patient. I employ it in the following manner: A piece of wire, the size of a fine knitting needle, is roughened for a half inch from one end, so that it may hold firmly a fibre of absorbent cotton twisted upon it by rotation between the fingers. This cotton wrapping, when dipped into a saturated solution of chloride of zinc, will be ready for use. This medicated cotton-lined probe is thrust to the very bottom of a crypt, and kept there several seconds. When it is withdrawn the whitened orifice alone marks to the eye the cauterization. By renewing the cotton for each follicle, several may be thoroughly cauterized at the same sitting, without causing any annoying irritation to the throat. A very few applications will cause the gland to shrink, as will be seen one week after the destructive cauterization has been made to the interior of the follicles. The more thorough the application, the greater the effect produced. I have tried chromic acid, but find it more diffusible than the zinc caustic. Although I used the chromic acid with care, it extended over a part of the surface of the tonsil, causing pain, and producing a soreness of the throat which was complained of for several days. The cotton is withdrawn upon the probe and is not left in the tonsil.

If several crypts are cauterized it is readily seen how a much larger surface can be influenced, as is exhibited by

the entire face of the tonsil, with the very marked advantage of causing no surface ulceration, and therefore avoiding the necessary accompaniment—the sore throat.

The suggestion had been made by Dr. F. Donaldson, to puncture the tonsil with a sharp instrument and insert a crystal of chromic acid into the little wound through the open mouths of the crypts leading down into bottle-shaped cavities. We have a much more convenient access to the interior of the gland, and the caustic application is in every way a bloodless one. In attempts at destroying an hypertrophied tonsil by caustics, the destructive agent used should clearly be inserted within these blind chambers, and should not be applied for the excoriation of the side of the throat.

ART. II.—*The Lancet and Blood-Letting, Considered in the Light of Fifty Years' Experience.* By SAMUEL COATES, M. D., Henrico Co., Va.

Having been requested to give the result of my experience of fifty years in the employment of the lancet, I offer a few remarks on the subject for what they are worth.

It is well known that, from the days of Hippocrates to the present time, there has been much difference of opinion as to blood-letting as a remedial agent. With all the lights furnished by much experience, there have been extremists, if not enthusiasts, on both sides of the question. Galen—whose medical acquirements were superior to the time in which he lived—was opposed in regard to bleeding by the followers of Erasistratus, who condemned it, as increasing the debility with which they had to contend in the treatment of all diseases. At a later day the use of the lancet was opposed by Brown, of Edinburgh, whose principal remedies in the treatment of all maladies—whether of a sthenic or asthenic character—were brandy, wine and opium, employed with the view of sustaining his patients against the debility which, according to his theory, he had to combat. On the other side of the question may be mentioned the name of Armstrong, who declared that the lancet was the right hand of medicine, and calomel perhaps the left.

That the lancet is a potent agent for either good or evil, is admitted, and this is the case with all other powerful remedies. Does this fact demand or justify the abandonment of all such agents in the practice of medicine? At the present time extremists, without any experience as to the good or evil to be accomplished by bleeding, seem to be arrayed against it under any circumstances whatever. But what were the great evils following the employment of the lancet in the hands of well educated physicians, when it was a more popular remedy? While bleeding was both popular and fashionable, there is no doubt the operation was unnecessarily resorted to, and sometimes when it was contra-indicated. But how many persons were thus killed? Have the savans of the present day discovered that Galen, Sydenham, Armstrong and Rush killed more of their patients than they cured, by bleeding? Prof. Potter, of Baltimore, once a pupil of Dr. Rush, used to say, "The sanguinary practice so familiar to us would not alarm him, who well knows it is not debility, but disorganization that is to be apprehended in fevers and inflammations." Is not the lancet ignored by many practitioners without experience in its employment, because, according to their theories, the diseases of our country generally are of an asthenic character, and their patients, being consequently anæmic, require building up and sustaining with stimulants and tonics? "Fashion is an inexorable tyrant, and most of the world its willing slaves."

It has become unfashionable to bleed; consequently there is a popular prejudice against it, and this prejudice is an obstacle in the way of a young physician especially, knowing that he would be subject to a great hue and cry if he should lose a patient after bleeding. We now witness an inconsistency strange to me—the substitution of whiskey for the lancet—and it appears to me that whiskey thus employed has killed many more than bleeding ever did when it was a fashionable remedy. It would be difficult to effect a compromise between the old "Fogy" with his lancet and the young "Fogy" with his whiskey.

What means have we at our command that can afford so prompt and efficient relief in apoplexy, puerperal convul-

sions, croup, pneumonia and the hot stage of intermittent fever threatened with serious congestions, as the lancet judiciously employed? I have again and again witnessed the prompt relief by bleeding in such cases without serious harm in a single instance; and yet the cry of to-day is, "the loss of blood is too depressing," notwithstanding the fact that the affections enumerated above, if not arrested by timely and perhaps heroic treatment, will soon be followed by a far worse depression, and one from which there can be no reaction. There is no debility from which the system will more promptly react and rally to a safe point, than from that which follows the loss of blood when judiciously drawn, nor is there a remedy more under the control of the physician, nor one the effects of which can be so readily recognized—the pulse being the guide.

It is popular to talk about "building up and sustaining the system." Do not the stimulants and the so-called tonics, now so fashionable, often build up and sustain inflammations and fevers that rapidly pull down what these remedies are employed to build up? Yet stimulants and tonics are valuable remedies when properly employed.

We come now to a very important question—Has there been such a change in the character of our diseases as to demand the change in their treatment now pursued? The lancet can be as well borne now as it was fifty years ago. The greatest change under my observation has been that of diphtheria taking the place of scarlatina to a great extent. We have no more diseases of a typhoid type now than there were at the commencement of my experience. Is not a typhoid imagination often employed in diagnosis?

Fashion still prevails and controls its votaries, often against the light of experience, and not only remedies, but certain diseases—in the imagination at least—become fashionable. Has not gynæcology with many become "the one idea"? What is more fashionable at the present day than uterine disease? Many real uterine troubles have come into my hands, but every adult female, requiring or demanding medical treatment has not been subjected to an instrumental examination with the view of ascertaining whether the uterus

might not be the *fons et origo* of all her ills. Abuse of means in the treatment of imaginary disease should not be fashionable, but the power of the imagination is often a power to the purse of the doctor. Is there not at this time much more abuse of hysterotomy and in the treatment of alleged uterine diseases generally than there ever was in phlebotomy, employed by well educated physicians?

Scientific medicine is truly progressive, and it has accomplished much, but has not humbuggery kept equal pace and done much towards driving the lancet from its proper place in the armamentarium medicum of the present time? Many of the new remedies now offered to the medical profession are truly valuable, while many of them also are worthless; but if those practitioners who have heretofore ignored the lancet will now adopt it, as a *new* remedy—new to them at least—it will accomplish more good, in my opinion, than any medicine discovered or invented since the commencement of their practice.

Experientia docet, autem consuetudo pro lege habetur.

Clinical Reports.

Case of Recovery from Severe Penetrating Gun-shot Wound of the Brain, without Symptoms of Brain Lesion.* By SOLON F. BLISS, M. D., Brooklyn, N. Y.

Charles R., of this city, æt. 18, of slim build, light complexion, light colored hair and blue eyes, while handling a Smith and Wesson 22-calibre pistol on Sunday, October 28, 1883, caused its discharge, perhaps accidentally. I was summoned to attend him, and reached his residence within half an hour after the shooting. I found a small gun-shot wound of the head in the right temporal region about one inch above and in front of the ear. Symptoms of shock had occurred, the pulse having dropped to about forty beats per minute, and the respiration being much below the normal condition. The patient retained entire consciousness, and

* Although a fairly correct account of this case appeared in the daily papers of New York and Brooklyn some time in December, 1883, the editors of the *Monthly* felt that a case possessing such features of unusual interest should be placed on record in some medical publication, and at their request, Dr. Bliss has kindly furnished it to this journal.

there was no discharge of brain matter from the wound, and very little hæmorrhage. On inserting a Nélaton probe, it was found to pass two or three inches backward through the brain tissue but the extreme restlessness of the wounded man prevented a full examination. Ice bags were ordered to be applied to the head, and a sedative mixture, containing fifteen grains of hydrate of chloral and twenty grains of bromide of potash, was directed to be given every two or four hours as occasion required.

The following day, accompanied by my friend, Dr. Jacob Nehrbas, I again visited the patient, and finding him sufficiently quiet, we made a more thorough exploration of the wound. We found it possible to pass the probe backward and slightly upward toward the left, a distance of a little over five inches from the point of entrance, but were unable to detect the ball. Fearful of the immediate consequences which might ensue from further effort on our part, we desisted, allowing the foreign body to remain imbedded in the brain tissue, and—continuing the ice bags and sedative prescription—ordered the adoption of the fullest supportive treatment.

During the first week after the shooting the patient suffered from three slight convulsions, but was at no period delirious, and never exhibited symptoms approaching coma, being at all times able to converse rationally. His pulse from forty beats gradually increased in power, until about ten days from the injury it stood at eighty, the respiration resuming its natural frequency before that time. The supporting treatment consisted of milk, beef tea, alcoholic stimulants, quinine, etc., and with the exception noted above he received nothing beyond this, all the functions of life becoming normal soon after the shooting. We ceased our visits about November 10th, and in three weeks from the date of the injury, the patient was up and walking about, informing me at that time that he never felt better in his life. A few days afterward he returned to his usual occupation, and has since that time worked steadily, without a single bad symptom, at his trade as a lithographer.

This case is reported not of course to laud the method of treatment, as we recognize that Nature accomplished the recovery, but because of its rarity, there having been very few instances on record where a ball has penetrated the centre of the cerebrum to a distance of at least five inches, and become encysted there, giving rise to no unpleasant sequelæ.

Another remarkable feature in this case was that the patient retained the use of his reasoning faculties from the moment of the injury—save of course during his slight convulsive attacks—being able at all times to express his desires and to make rational answers to questions. When we first discovered the extent of damage to the brain tissue we had little expectation of his recovery, and so announced our opinion to the family; but as he gained in strength every day after the shock, we soon began to hope for the encysting of the ball, and the result was all that could be desired. We can only class this case with those of the unexpected recoveries in surgery that are occasionally reported from different sections, the “tamping-iron case” of Dr. J. W. Harlow, of Vermont, in 1848, standing at the head of the list. Whether in the future, the injury to the brain matter and the presence of a foreign body in the cerebrum, may produce untoward results, it is of course impossible to say, but certainly at present the young man in question rejoices in an apparently sound condition of health, mind and spirits.

The patient was extremely fortunate in possessing a constitution free even from the hereditary taint of alcoholism, and no history of constitutional disease exists in the immediate family. He received the most careful and devoted nursing, his digestive organs were in a full condition of health, and there being no apparent indication for much medicinal treatment the functions of the stomach were at no time disturbed by dosing, all of which was of course greatly in favor of his recovery from a severe injury.

652 *Herkimer street.*

Extra-Uterine Fœtation—Decomposition of Fœtus, and Removal of Bones per Rectum. By SAMUEL P. BROWN, M. D., Cartersville, Va.

Shortly after my return from Blue Ridge Springs, Va., last Fall, I was called to see Amanda Miles, colored, aged thirty-six years. She had been married sixteen years, but never thought she had conceived. She had, however, complained of great nausea at times, with frequent disposition to spit up her food; she was also of a constipated habit.

These and other symptoms led me to make a diagnosis of dyspepsia. I ordered her to give up her pipe, coffee, etc., and prescribed for the dyspepsia, and also gave her an active purge.

In a few days she came to my house to tell me that she felt greatly relieved; but, at the same time, she brought with her a small package of bones which she said were "discharged from her bowels when the purgative medicine acted." To my surprise, I found them to be foetal bones, consisting of several ribs, a scapula, clavicle and humerus—the latter bone about two and a-half inches long. She stated that her bowels had again become constipated. With the hope that some of this constipation might be due to other foetal bones that had escaped into the bowel beyond the reach of a digital examination, and having noticed the good results of the former purgative, I again ordered some purgative pills, with directions to take them only as needed—being careful not to allow herself to become "costive" again.

After several weeks, I was sent for in haste, to see her as she was "suffering very much." On my arrival at her bedside, I found her in great pain, and she complained especially of something sticking in her rectum or lower bowels "like pins." I made a vaginal examination, and, to my surprise, I found not the slightest sensitiveness to touch of the uterus, nor any other abnormality about it. While examining her, the woman reminded me that "those bones did not come that way—that they came from the bowels. A rectal exploration revealed that the rectum was impacted with bones—many of which I dislodged. Among the pieces removed were fragments of the foetal vertebræ, ribs, a femur, and the occiput. She was so much exhausted before I had fully accomplished what I desired that I determined to let her rest. I gave a stimulant at once, and ordered an enema of castor oil with warm water to be given as soon as she rallied—as much as could be forced into the rectum—in order to distend and fully evacuate the lower bowel. As I could not longer remain with the case, and as I knew there were other bones remaining, and particularly fearing that the serrated edges of some of the cranial bones, in their passage, might do damage, I thought it the better policy, under the circumstances, to keep the rectum thoroughly lubricated by the oil enemata. Besides, by such injections, my hope was that the peristaltic action of the bowel would be increased, and thus not allow time for any other loose pieces of bone to become imbedded in the surrounding tissues.

During the evening of the same day, by personal request, Dr. H. R. Dupuy accompanied me. After much trouble, with a pair of bullet forceps, he extracted two pieces—the two parietal bones, which were deeply imbedded in the rectal tissues—and some other fragments of bone. After this operation, there was little trouble, as the patient discharged the remaining bones during the next action from her bowels.

I omitted to mention that in this woman's former history, she had much trouble and pain at each menstrual discharge; but during the last fifteen months she has been regular, and has not suffered the least pain during any of her periods.

This is the first case of extra-uterine foetation, and deliver of the debris *per rectum*, that I have ever met. Cases of the kind, it is true, are recorded in Parry's work on *Extra-Uterine Pregnancy*; but as he states that physicians do not report their cases, I have determined to report this case, for what it may be worth.

Original Translations.

From the French and German. By WM. C. DABNEY, M. D., Charlottesville, Va.

The Treatment of Alcoholism by Strychnine.—In the *Bulletin Général de Thérapeutique* for January 15th, 1884, M. Dujardin-Beaumetz has a very interesting paper on this subject. After referring very briefly to the suggestions on the subject by Giacomini and Maynus Huss, he says that the credit of having first demonstrated the value of strychnine in delirium tremens is due to Luton (of Reims). He considered strychnine the antidote to alcohol, and did not hesitate to give very large doses of the alkaloid in cases of delirium tremens. For example, he states that he frequently gave hypodermic injections of five milligrammes (about one-fifteenth of a grain) of sulphate of strychnia two or three times a day, or he gave by the mouth three centigrammes of the same drug per day in divided doses, or else twenty centigrammes of the extract of *nux vomica* or eight grammes of the tincture.

Luton, however, went much further than this, and proposed that strychnine should be used as a preventive of the injurious effects of alcohol, and that, for this purpose, it should be added to such liquors as absinthe, etc. Indeed, he

even went so far as to urge that the State should take the matter in hand, and require the addition of a certain quantity of strychnine to all the stronger alcoholic liquors. Numberless cases have been reported in which the evil effects of liquor—so far as the intoxication is concerned—have been prevented by strychnine; one of the most striking cases was reported by an American physician, Morey, in the *Practitioner* for September, 1875.

M. Dujardin-Beaumetz refers next to the experiments of Amagat, who found that rabbits weighing 1,900 grammes were poisoned by twelve grammes of alcohol; but if one milligramme of strychnia was administered at the same time a much larger quantity of alcohol could be taken without fatal consequences. The converse was also found to be true—namely—that animals could take much larger doses of strychnine when under the influence of alcoholic stimulants.

He calls attention in the next place to the fact that alcoholics can resist poisons much better than other persons, and he instances not only strychnine, but also opium and digitalis. [This statement is open to doubt, even when made by such a high authority.—W. C. D.] It is needless to mention the theory advanced by the author as to the *modus operandi* of this antagonism.

The effect of strychnine in cases of delirium tremens, he says, is most certain and powerful. He has given it many times since Luton's papers was published, and has always obtained good results. He has usually employed sulphate of strychnia in the dose recommended by Luton, namely, about one-fifteenth of a grain hypodermically, which he repeats in five hours if necessary; occasionally he administers a third injection of the same quantity during the twenty-four hours. He does not agree with Luton, however, in thinking that strychnine antagonizes alcohol in *all* of its effects, but only of those in the brain and spinal centres. It does not prevent the inflammation of the liver, the disturbances of the gastrointestinal mucous membrane, the atheromatous changes in the arteries, nor the inflammations of the meninges to which old drunkards are so liable; indeed, M. Jaillet has used strychnine with animals to prevent the dangerous nervous symptoms of alcoholic poisoning, in order that he might study the subsequent gastric ulceration caused by the alcohol. Strychnia then, he concludes, should be used to prevent the drunkenness and delirium of alcoholism, but not the organic changes to which it gives rise.

Corrosive Sublimate as a Disinfectant in Obstetrics.—By Dr. A. Toporski. (*Cetral-blatt für Gynækologie* November 9, 1883.) The recent animated discussion in the New York Academy of Medicine, and the description of Braun's antiseptic obstetrical methods lately published in the *Medical News* have doubtless created much interest on the subject of antisepsis in midwifery practice, and the present paper by Toporski will therefore be of interest. It is based on observations made in the Lying-in Hospital at Breslau. Prior to last year carbolic acid had been used; then corrosive sublimate was substituted for it. Every woman in labor in the Breslau Maternité has a vaginal injection given her before and after each vaginal examination, the same solution being used which is employed after child-birth to wash out the vagina and uterus. The solution employed at first was one part of corrosive sublimate to one thousand of water, but as this caused some burning, it was changed to one part of the drug to two thousand of water. When the injection has to be used for the interior of the uterus, a glass tube pierced with holes is employed, much like Chamberlain's glass tubes, which are used in New York for the same purpose.

The results furnished by corrosive sublimate were exceedingly satisfactory. Comparing two terms or half years, one in 1882 when carbolic acid was used, and one in 1883 when corrosive sublimate was used, it was found that under the use of carbolic acid the woman remained in the hospital on an average 11.37 days after their accouchment, while when corrosive sublimate was employed the average was only 8.9 days. In 1882, 16.27 per cent. of those confined in the hospital had some sickness thereafter, while in 1883 only 7.5 per cent. were sick. There was but one death in either year, and that occurred in 1883, and was clearly traceable to carelessness on the part of a student who had been dressing suppurating wounds, and then visited this woman without using proper precautions to prevent infecting her. In 1882, the twenty-one patients who were detained in the hospital by sickness remained on an average 20.76 days, while the eight who were similarly detained in 1883, remained on an average only 13.37 days. Unfortunately the author does not mention what the mortality from other causes and in other forms of sickness was during the same periods, and hence his paper lacks much of the scientific value which it would otherwise possess.

In one of the cases, there remained in the genital canal a considerable part of the membranes, and in seven other cases

small pieces were similarly retained; yet in none of these women was the slightest fever observed, though there had always been a rise of temperature in such cases before the employment of the sublimate injections. The method of treatment adopted too was peculiar. A ligature was thrown around that part of the membranes which projected from the vagina, and all below or outside of the ligature was cut away—this little operation being repeated twice a day till the whole was expelled by the uterus. The vagina was washed out each time with the sublimate solution, and then the vulva was covered with a compress wet with the solution of one per 1,000, and this compress was changed every thirty minutes.

The Physiological and Therapeutical Effects of Paraldehyde.—Several papers have recently appeared describing the effects produced by this drug when taken internally, and it bids fair to become a valuable addition to our materia medica. In the *Bulletin Général de Therapeutique* for January 30th, 1884, M. Dujardin-Beaumetz publishes a valuable paper on the subject of which I propose to give a brief abstract. (In the same journal is a paper by M. Yvon, describing the chemical composition and properties of aldehyde and paraldehyde, which will be referred to first.)

Aldehyde has, he says, the formula $C^2 H^4 O$ —that of alcohol being $C^2 H^6 O$. Aldehyde, therefore, is nothing more than alcohol which has lost two molecules of hydrogen. It is a colorless liquid of very strong and penetrating odor, and boils at a temperature of $21^\circ C$. It is inflammable and burns with a pale flame. It mixes with water, alcohol and ether in all proportions. It readily absorbs oxygen and is then converted into acetic acid. Its boiling point is too low to allow of its use as a medicine, but it readily undergoes molecular transformations, and when condensed it forms paraldehyde which is composed of three molecules of aldehyde, and has for its formula $3 (C^2 H^4 O)$, or $C^6 H^{12} O^3$.

Paraldehyde is readily soluble in water, and strangely enough, is more soluble in cold than in hot water. The taste is pungent but not unpleasant, nor does it cause the unpleasant sensation in the throat which hydrate of chloral does. Paraldehyde only boils at the temperature of $124^\circ C$., and hence is free from one of the chief disadvantages of aldehyde.

M. Dujardin-Beaumetz says that in animals the drug produces profound sleep, but that this sleep which may last over twenty-four hours, is not attended by anæsthesia or analgesia,

and the animal may always be aroused by pinching it. He states that he has tried it with a number of patients, and has found the effects similar to those produced in animals. All of these patients remarked that paraldehyde was much less disagreeable to take than chloral, and in some a sort of intoxication was noticed ten or fifteen minutes after the remedy was taken, but this soon passed off and was followed by refreshing sleep, which usually lasted from four to eight hours. When they awoke there was no headache or discomfort of any kind, the only thing noticeable being that when as much as 3 grammes had been taken the patients exhaled the odor of paraldehyde.

As a hypnotic, he considers paraldehyde superior to either morphine or chloral, the sleep being calmer than that produced by the latter drugs, and there being no unpleasant after-effects. It does not relieve pain, however, in the slightest degree. Its especial and indeed its *only* use is in insomnia. Here M. Dujardin-Beaumetz thinks it has no rival, and he says that M. Constantin Paul has found it very useful once in the sleeplessness of opium eaters.

He wisely says, in conclusion, that only further experiments can show whether it will produce any injurious effect on the organs of the body as the prolonged use of alcohol does. It will be important too to observe whether it is sufficiently stable to admit of general use. It is intermediate between alcohol and acetic acid, and seems to have a tendency to return to one or other of these substances.

The Use of Cold Shower Baths in Febrile Affections.—By A. Mogiljanski, *Wratsch*, 1883, Nos. 34, 37, 43, and *St. Petersburgen Medizinische Wochenschrift*, Jan. 7, 1884.—The value of cold douches in febrile affections has been tested in Prof. Manasse's clinic, and the present paper is based on eighty investigations made then—the following conclusions being reached:

1. Cold shower baths (the temperature ranging from 66° to 77° Fahr.) cause as great a diminution of temperature in fever cases as a bath at 77° continued ten minutes, and if two shower baths be given to a patient at an interval of an hour, the depression of temperature will be greater than if a bath of the common form be given.

2. Two shower baths and one common bath will effect a greater reduction of temperature than two ordinary baths and one douche.

3. The frequency of the heart's action is lessened by the cold douche.

4. The muscular strength is decidedly increased by the douche.

5. The respiration becomes slower, deeper and irregular.

6. The so-called typhoid condition is lessened by the douche, though the improvement only lasts a short time. In consequence of the deep inspirations, the danger of hypostatic congestion is in great measure prevented.

The Administration of Definite Proportions of Vaporized Chloroform and Air to Produce Anæsthesia.—M. Paul Bert has recently been experimenting on animals with a mixture of vaporized chloroform and atmospheric air, and the same mixture has also been used in a few instances upon the human subject. On January 14th, he read a paper on the subject before the Académie des Sciences, of which the following are the conclusions (*Gazette Hebdomadaire*, January 25th, 1884):

1. The mixture employed has always consisted of eight grammes of vaporized chloroform and 100 litres of air. When 7 instead of 8 grammes of chloroform were used, the anæsthesia has not sufficiently profound, and on the other hand it was found to be entirely unnecessary to use a larger quantity of the drug.

2. The mixture is not disagreeable when respired—some patients finding it pleasant. There is no cough, no suffocation, no threatened arrest of respiration, and consequently no stage of “repulsion.”

3. The stage of excitement is always very short, and the excitement itself very slight. It never lasts more than two or three minutes, and in a very considerable proportion of cases is entirely absent.

4. Complete insensibility is produced in six or eight minutes at farthest, and continues during the whole time that the anæsthetic mixture is inhaled. The pulse, which is sometimes a little excited at first, becomes quiet and regular, and remains so; the respiration is also excellent; nausea and vomiting has never been observed; salivation is very slight; the temperature is not modified in any way.

5. After the apparatus through which the gas is inhaled is moved there is always a considerable prolongation of the time during which anæsthesia is complete—the length of time being in proportion to the time during which the mixture has been respired.

6. The vapor is so dilute that there is but little of the odor of chloroform around the patient to annoy the physicians.

In the *Gazette Hebdomadaire* for January 11th, M. Catrin

reports four cases in which anæsthesia was produced by this method. In the first, the lower jaw was excised; in the second, a cyst was punctured and iodine injected into it; in the third, a child seventeen months old was operated on for exstrophy of the bladder, and in the fourth amputation of the leg was performed. In two of these cases there was a very short stage of excitement, and in the other two it was entirely absent. In all unconsciousness was very promptly produced, and analgesia persisted for a time even after the return of consciousness.

The apparatus employed by M. Bert consists of two cylindrical gasometers containing 150 litres each; these are so arranged that by the use of weights one is filled while the patient is employing the other. The air in entering the gasometer passes through a little receptacle containing the chloroform which is to be vaporized, and the vapor is inhaled through a caoutchouc mouth piece provided with two valves. In operations on the mouth M. Bert states that if necessary the tube can be carried to the back part of the throat, so that the vapor is inhaled directly and the mouth can be operated on with ease.

Proceedings of Societies.

NEW YORK NEUROLOGICAL SOCIETY.

Stated Meeting, March 4th, 1884.

Dr. W. J. Morton, President, in the chair.

Morbid Somnolence* was the title of a paper read by Dr. C. L. Dana, in the course of which he related a number of histories illustrating different forms of this affection. These forms are classified as follows:

1. Epileptoid sleeping states.
2. Hysteroid sleeping states, including (a) spontaneous or "mesmeric" sleep; (b) trance and lethargic states.
3. Morbid somnolence, the expression of a distinct neurosis (narcolepsy).
4. Unclassified forms.

The speaker's first case (illustrating Class 3) was that of a young man of a wealthy family, who would go to bed at the ordinary hour and could not be roused till noon, or afternoon or evening, of the next day. This would continue for a week or two, when the symptoms would remit.

* This paper will appear in full in the April number of the *Journal of Nervous and Mental Disease*.

A second case (illustrating Class 2) was that of a young lady who had short attacks of catalepsy, cataleptic *petit-mal*, alternating with sudden attacks of sleep. These came on several times daily. Three other cases (illustrating Class 3) were of neurasthenic persons who, for several months, had persistent drowsiness, not attributable to any nutritive or organic disorder.

Dr. Dana also reported a case furnished by Dr. L. Putzel, illustrating the epileptoid sleeping states.

DISCUSSION ON DR. DANA'S PAPER.—Dr. Wm. M. Leszynsky: "I know of two cases which might be termed a mild form of morbid somnolence, where the patient would fall asleep at almost any hour of the day while reading or conversing, the sleep lasting at times for an hour or more!

"The cause of this somnolence seemed to me to be undoubtedly due to faulty assimilation of food, and was cured by the use of nitro-muriatic acid, etc."

Dr. Weber: "I have seen but a few cases. In diabetes morbid somnolence is believed to be a prominent symptom. I have seen twenty or thirty of such cases, well pronounced, but have not seen one case where morbid somnolence prevailed; on the contrary, the patients did not sleep as much as normal.

"I remember two cases of locomotor ataxia, in which there was a great tendency to prolonged sleep. In one of these cases the man would sleep often fifteen hours at a time.

"I have observed sopor in chronic endarteritis in a number of cases, especially in cases where the condition of cerebral arteries tends to apoplexy. There was one man who would fall asleep during dinner, be taken up to bed, and there sleep till the next day."

Drs. Roberts and C. E. Nelson made remarks, giving cases, as to making up sleep-time after prolonged vigil. Dr. Roberts remarked that sopor was met with in his case of myxoedema, read previously before this Society and published. In such cases sopor is recognized as a symptom of disease.

Dr. Shaw, of Brooklyn, related a case of a man who would fall asleep in the clinic.

Dr. R. B. Prescott said: "I have one case bearing on this subject, Mr. President, which came into mind while Dr. Dana was reading his paper, and which, as it may not be altogether without interest, I will relate. It is that of a farmer, unmarried, forty years of age or more, living in a small village in Massachusetts, who, some ten years ago, be-

gan, without any apparent cause, to be troubled with excessive drowsiness. It manifested itself first in a disposition to sleep unseasonably long in the morning. He would remain in bed until long after the breakfast hour, and complain at intervals during the day of still feeling sleepy. Gradually he came to neglect the work of his farm and remained about the house dozing away a considerable portion of the time. His social nature, too, underwent a decided change. He became reserved and silent. He shunned all intercourse with friends and acquaintances; was with difficulty made even to answer ordinary questions, and was easily moved to tears. On one occasion I was told that he fell asleep on his wagon while taking a load of produce to the nearest market town, and slept soundly for many hours, his horse having of his own will taken an unfrequented road and finally stopped at the place where he was discovered, the driver still fast asleep.

"His condition at present is that of a gradually deepening mental lethargy. He passes a large portion of his time in bed, and takes little interest in what takes place around him, though at times he partially arouses and will read the newspapers or carry on a brief conversation—mainly in monosyllabic replies to questions. His bodily functions are all normal, and there is no evidence of any physical disease. His general health was good up to the time of the appearance of this morbid somnolency, and he is not the subject of any hereditary taint so far as known. He is now regarded by those who know him as mildly insane, and his recovery is not expected."

The President said: "I have seen and treated but one of these very peculiar cases which I should be willing, following Dr. Dana's lines of diagnosis, to classify as true morbid somnolence. Of course, those who sleep after prolonged forced wakefulness do not fall within the author's categories.

"As an instance of simple sleep of this nature, I well remember of sleeping twenty-four hours without a moment of recollected consciousness after two days and two nights in the saddle during a time of great danger. This may be said to be simply normal somnolence. The case of morbid somnolence I refer to was that of a physician in this city who had suffered from this condition for fifteen years. He was habitually overcome by an uncontrollable desire to sleep during the day-time, no matter how malapropos the time or place. This desire he would fight against with all his power of control, but would finally yield to sopor. Even in the dentist's chair, while a sensitive tooth was being "scraped,"

he had fallen asleep. Often in the rounds of daily practice he would feel this lethargy creeping over him at critical moments, as, for instance, when his service were most needed at a confinement, and would be forced to yield to it and sleep. It was impossible for the same reason for him to read or study. In fact, life was becoming to him a soporific blank.

"Other symptoms were forgetfulness, frontal and occipital headache, a general malaise, great sense of weariness, palpitation of the heart on active exercise, and prostatic irritation. He had been examined time and time again by friends of eminence in the medical profession for organic disease, and none existed. The urine especially had been the subject of careful tests. I repeated these examinations with no better results. Malaria was out of the question. I treated this patient on the basis of a profound anæmia—gave him large and increasing doses of iron (Bland's pills) until he was taking thirty grains three times daily, and gave him additionally, glonoin. Under this treatment he improved wonderfully, and at his last visit several months ago he reported that he seldom fell asleep during the day."

Dr. Dana, in closing the discussion, gave a similar case to the English farmer. This case would have periods of remission for several years. These cases are supposed to end in insanity. There is persistent drowsiness in diabetes and in syphilis; also previous to attacks of epilepsy. There is recognized a "sleeping sickness" in Africa. The French authority, Ballet, mentions these conditions.

Treatment of Wry Neck by Sulphate of Atropia.—By W. M. Leszynsky, M. D. The reader related the history in the case of a young woman whose occupation being that of a book-folder she was obliged to turn her head very frequently toward the left side. The right sterno-cleido-mastoid and trapezius muscles became affected with a very severe form of clonic spasm, which almost exhausted the strength of the patient. The treatment adopted was the daily injection of sulphate of atropia into the contracting muscles, beginning with one-eightieth grain and gradually increasing to one-sixth grain, which maximum dose was continued four days, when recovery supervened.

In addition to the atropia, galvanism was used, and the faradic current was applied to the opposite side.

DISCUSSION.—Dr. J. C. Shaw: "I have been called three times in consultation in these cases where atropine was used. There was a great deal of pain and marked neuropathic ten-

dency; insanity in the family in one case. There is one difficulty in the treatment by atropine, that it sometimes causes disagreeable symptoms—especially in delicate women. In one case, where the drug was pushed, it caused such distress that the patient, a woman, refused to take it longer. Atropine in large doses cannot be used in all cases therefore.”

Dr. C. L. Dana said “that Dr. Leszynsky was entitled to great credit in employing atropia against such physiological odds. He believed that the cure was due to the employment of atropia. One point must be borne in mind, and that is that we must select our cases; in those cases where the disease is plainly neurosis, atropine may answer. In many cases, however, the disease appears to be of a peripheral and rheumatic character. Here anti-rheumatic remedies answer better.”

Dr. Gibney: “In view of the fact that Dr. Leszynsky administered electricity and other agents, as his report shows, some doubt might be expressed as to the curative effects of the atropine injections. The relationship of cause and effect does not seem sharply enough defined. I have had no personal experience with this drug in torticollis. A few years ago in a case of rotary spasm of the head I had very prompt and excellent result in the use of the fluid extract of gelseminum carried to toxic doses. Dr. Leszynsky certainly deserves credit for the heroic dosage of atropine in his case.”

Dr. Birdsall related the history of a case of torticollis treated at the Manhattan Hospital by his Assistant, Dr. Terriberry, in a child about eight years of age, by the application of as strong a galvanic current as could be endured for from twenty to thirty minutes, on the affected muscles, three times a week, for several weeks, with gradual improvement, which finally terminated in complete recovery. Tincture of belladonna was administered in drop-doses, until slight physiological effects were produced. Dr. Birdsall was inclined to credit the curative effect in this case mainly to the galvanism, though he thought that a combination of the method with atropia and that of galvanism would in general be far more serviceable than either alone.

Dr. Weber: “Was a traumatic effect produced by the hypodermic injections?”

Dr. Leszynsky: “The injections were made into the substance of the muscle, and no traumatic effect was produced. The preparation of atropia used was Merck’s, and the solution was freshly prepared every two or three days.”

Dr. David Webster said:—“Mr. President:—I have list-

ened to Dr. Leszynsky's paper with much interest. Although I have seen but few cases of wry neck, I have had a good deal of experience with atropine, and I beg leave to question whether the same results might not have been accomplished by smaller doses applied locally. For the purpose of relaxing the sphincter pupillæ and the ciliary muscle, we never give atropia by the mouth or hypodermically, but always apply it locally—to the surface of the eye-ball. Less than one-twenty-thousandth of a grain applied to the conjunctiva will paralyze the muscles I have named, while it would require a many times larger dose to produce the same effect if given hypodermically.

"It is remarkable that Dr. Leszynsky's patient tolerated so large a dose as one-sixth of a grain. There is a wide difference in the quantity required to produce the physiological effects of the drug in different persons. I have frequently seen a drop of a four-grain solution, applied to the eye, produce the peculiar scarlet flushing of the face, especially in infants. I also know of a case in which a single drop in the eye caused marked delirium in a young lady, so that she had to be taken home in a carriage. I have had some personal experience with the physiological effects of atropia. I once swallowed what I supposed to be ten drops of Magendie's solution of morphia to check a diarrhœa while I went to Brooklyn to assist in an enucleation. On the way I noticed that I felt very strangely, going off into curious dreams, entering into imaginary conversations, etc. When I got to the place of operation I found, on attempting to talk, that I could scarcely speak above a whisper, my mouth and throat were so dry. Dr. Agnew noticed that my face was flushed and my pupils dilated. I went home and went to bed, and slept soundly until the next morning. As soon as I awoke it dawned upon me that I must have taken atropine instead of morphine. As soon as I saw Dr. Agnew he told me he had arrived at the same conclusion. I found the atropine and morphine bottles side by side on my table. The mystery was explained.

"I once saw a case in the practice of a brother practitioner where one-sixteenth of a grain of sulphate of atropia given with half a grain of morphia subcutaneously, produced delirium, lasting for half a day or more. This was in a hysterical lady who was used to hypodermics of morphia without atropia. Dr. Leszynsky's method of giving the drug was a perfectly safe one, however, as he cautiously felt his way from smaller to larger doses."

Dr. G. W. Jacoby said: "It was not my intention to make any remarks upon this subject, as the objection which I intended to raise to the indiscriminate employment of galvanism and atropine in the treatment of Dr. Leszynsky's case, has already been made by some of the preceding speakers; but Dr. Gibney's remarks in reference to the facility of producing the physiological effects of atropine, in some cases, by very minute doses, recall to my mind very vividly a case in which this was also very noticeable. The patient, a girl aged twelve years, came to me affected with a left-sided tonic torticollis, probably of rheumatic origin. My results with electricity upon other cases having been unsatisfactory, I determined to treat this case by the hypodermic injection of sulphate of atropia. I therefore injected one-fiftieth of a grain of the drug.

"This one injection produced all the symptoms of atropine poisoning, ending in a violent delirium which lasted for ten hours. When the patient had recovered from the effects of the atropine I naturally felt reluctant to continue its use, and began treatment of the torticollis by galvanism. After two weeks the child was discharged from treatment, entirely recovered.

"The points that I wish to mark are, firstly, the small amount of atropine necessary in this case to produce delirium, and, secondly, the fact of a cure by self-limitation or possibly through the action of the galvanic current. Had no ill effects resulted from the use of the atropia, I would probably have continued its use, and my patient recovering, it would have been only natural to attribute this recovery to the use of the atropine.

"Therefore, we cannot be too cautious in drawing conclusions from a single case, no matter how well observed, and we should be very careful not to use two potent remedies, such as galvanism and atropine simultaneously, as our scepticism in regard to the efficiency of either one will not be considered scientific proof of the beneficial action of the other."

Dr. Leszynsky, in closing the discussion, said: "As Dr. Dana saw the patient referred to in my paper, I am pleased to hear that he agrees with me in stating that recovery was due to the employment of the atropia. In reporting the history of this case, I expected that the question would arise as to which of the remedies employed had effected the cure; therefore I was not surprised to hear the criticism of Drs. Gibney and Jacoby, and in reply I will state that the num-

ber of cells used in applying the galvanic current was from ten to twenty of a Stohrer portable battery. The patient could not tolerate a stronger application, and this was continued for nearly fifteen minutes daily. After the removal of the electrodes I found that the spasm invariably became more vigorous than ever, and I always allowed about ten minutes to elapse before injecting the atropia.

"I would again direct the attention of the Society to the fact that notwithstanding the daily application of galvanism in conjunction with the use of atropia, *no improvement was shown until the twentieth day, soon after a rapid increase of the atropia from one-twentieth grain to nearly one eighth grain.* Then the improvement became so evident that it can hardly be doubted that the atropia was the important element which effected the successful result. In regard to the use of the bromide of sodium, I can safely say that bromism was not produced. The faucial reflex was frequently tested and remained well marked throughout the entire course of treatment.

"Dr. Webster's suggestion may be a very good one if we accept it from an ophthalmological standpoint, but in this class of cases I cannot see what advantage could be gained by the inunction of the oleate of atropia. The object in using this sulphate of atropia was to produce paralysis of the trunk and branches of the spinal accessory nerve; therefore it was injected into the substance of the muscle for the purpose of producing its *local effects* on the motor nerve, although eminent authorities like Ringer and Traser have concluded after an elaborate series of experiments upon living animals, that atropia paralyzes the motor nerves through its action upon the spinal cord, and not by its action through the circulation. I believe that the oleate if applied locally would produce more rapid constitutional symptoms on account of its speedy absorption, and another objection is that the dose cannot be so accurately determined.

"In conclusion, I will state that the patient remains well and that no sign nor symptom of spasm has since been shown."

NOMINATION OF OFFICERS FOR THE ENSUING YEAR.—President: Birdsall, Gray, Morton, W. A. Hammond; First Vice-President, C. L. Dana; Second Vice-President, G. W. Jacoby; Recording Secretary, E. C. Wendt; Corresponding Secretary, W. M. Leszynsky; Treasurer, E. C. Harwood; Councillors (five), Drs. Weber, Seguin, Jacobi, Morton, W. A. Hammond, McBride.

The Society then adjourned.

Analyses, Selections, etc.

Infant Diet.—In the course of an article on this subject in the *Archives of Pediatrics*, March 15, 1884, Dr. J. F. Gould, of Boston, Mass., says:

"One Cow's Milk," so long talked about, is a vast improvement over the prepared foods in the market, but this does not make so good a diet for children as the milk from several cows. Farmers as a class are close calculators in regard to money matters, and they select cows which give milk in large quantity without regard to quality—if it is to be sold as milk, or, if sold for cheese or butter, the cows are selected accordingly; hence by having milk from several cows, if we should get an excess of one of the above principles in one animal, it would be corrected by the deficiency of the same principle in another animal; therefore we get a standard milk by mixing several milks together.

My directions are as follows, viz: Take milk of a reliable milk-man, either morning's or night's milk, but not the two mixed. Take two teaspoonsful of crushed barley, add to twelve teaspoonsful of water, boil one-half hour; strain and add salt and bread soda, of each a piece equal to a small pea; one-half teaspoonful of sugar of milk and good brown sugar; mix and add this to six tablespoonsful of milk from several cows. Have two nursing bottles, with black rubber nipples and tubes, thoroughly cleansed, and the one not in use placed in clean, cold water. A nipple should be used because it is more natural, and because the action of the muscles and glands of the mouth commence the digestive process for liquids as the same parts do, plus teeth, for solid food, and must be more physiological than feeding by a spoon.

This is more apt to be too rich than too poor for infants from birth to two months of age. Each child must be made a special study. If the bowels are relaxed, use more barley; if constipated, add more water. If it vomits a solid curd, use more of the sugar of milk; if the discharges are sour, use more soda, or, what is better, one-half teaspoonful of Phillips' milk of magnesia. It will require four or five days to see if the above agrees with the infant. Barley is selected because it contains less starch, which is troublesome for young infants to digest; sugar of milk is used, because human milk contains more than the cow's, and tends to break up the cheese principle which cows' milk has over or in

greater amount than in breast milk. If a child vomits its food, it should throw up the milk as a *soft* curd, *not* as a piece of cheese. Sugar of milk tends to this, *i. e.*, to break up the curd. After two months of age the milk is increased one tablespoonful, and one teaspoonful of barley or crushed wheat each month. If care is used the child, in a few weeks, will be of a pinkish color, muscles will be hard, features *rounded*, but not *redundant*. In hot weather the food will require making once or twice daily. The little ones seem to be contented and grow solid. Have used this diet in cholera infantum where mother's milk would be instantly rejected and this be retained. Have had excellent results from it when the child had not been applied to the breast at all. It needs care in its preparation and in its administration, but it will do as well in cities as the majority of those who use breast milk. Mothers or nurses have many causes of excitement in cities, such as fire, murders, accidents, fright, sexual excitement and diseases, mental and physical perturbations, etc., which the animal is free from.

A Description of the "Mad-Stone."—In the *San Francisco Lancet*, January, 1884, Dr. W. J. Hoffman, of the Smithsonian Institute, Washington, D. C., describes as follows a specimen of that much vaunted article: Having just had the opportunity to carefully examine a so-called "mad-stone," a brief description thereof may not be uninteresting. The specimen was obtained by one of the United States Geological Survey, in North Carolina, during the past field season, and consists of a pebble measuring nine-tenths of an inch in length, three-fourths in width at the broadest part and six-tenths in height. Upon one side the surface is nearly flat, measuring seven-tenths by eight-tenths inches, and appears to have been the original surface resulting from cleavage. Its weight is 220 grains. The color is dirty-white, but upon the rounded surface has assumed a deep brick-red, which has penetrated into the body of the pebble, and resulted, no doubt, from infiltration of ferric compounds. The flat surface shows the veinings of coloring matter very distinctly, and, as it shades off through an orange tint into the white of the body of the stone, causes quite an attractive specimen. The rounded portion of the pebble, when held in the sunlight, shows a satin lustre of a strawberry and burnt senna tint, a reflection resembling that of the moon-stone, and labradorite, being characteristic of some of the feldspars, to which this example, no doubt, belongs.

The gentleman who sold it to the present owner stated that it had been obtained from the paunch of a white-spotted deer (*Macrurus virginianus*) shot about two years ago. It is natural to suppose that the partial albinism of the animal added considerable mystery to the specimen found within its body, and the finder being, no doubt, of a superstitious nature, at once experimented with it, with the result that one case of hydrophobia, and one of rattlesnake bite were cured. The person bitten by a mad-dog is said to have been a typical case, and a dog bitten by the same rabid animal died shortly afterward. Affidavits substantiating the above-mentioned cases are offered by the discoverer, but we shall not dwell upon the alleged merits of the stone until actual experiment shall have been performed under the direction of competent persons.

The manner of applying the stone is to heat it in hot water, and then to apply it to the wound, when its great absorbing (?) properties will at once cause it to adhere and extract the poison! It is said to partially bury itself into the soft parts, puckering the skin immediately around it.

When first hearing of the above specimen, I thought it might be one of the ordinary calcareous concretions sometimes met with in the herbivorous mammalia, but a piece of feldspar is quite an unusual deviation, and the only reason that can be given is that the deer's tongue coming in contact with a saline substance the animal would naturally swallow it on account of its extreme fondness for salt. The piece of feldspar may, by its exposure and gradual decomposition, have accumulated a thin film or incrustation of potash, which is its chief alkaline constituent, thus naturally affording a sufficiently salty taste for it to be swallowed entire.

Medical College Advertising.—The Committee on Ethics of the St. Louis Medical Society, December 15, 1883, made the following report, which we think nearly all general practitioners would desire to see adopted by the American Medical Association. (*St. Louis Medical and Surgical Journal*, February, 1884.) Your committee, to which was referred certain resolutions condemnatory of the present form of medical college announcements, respectfully report that such publications are in violation of both the spirit and letter of the National Code of Ethics.

If it is reprehensible in an individual physician to resort to public advertising, it certainly is none the less objectionable in an association of medical men. It cannot be that the

enormity of the offence is diminished by combination, nor can a collegiate shield justly protect from censure those who, individually, would not thus offend.

The condemnation which inevitably awaits one who advertises cannot consistently be withheld from others equally as capable, who are associated in the perpetration of precisely similar infractions.

We can but believe that honorable professors in respectable medical colleges recognize this evil, and are individually and collectively opposed to its existence and perpetuation.

There can be no doubt that the efficacy of such advertisements, as contained in college announcements, and the individual reward consequent upon public notification of professorships, has led to the unfortunate multiplication of medical schools, with consequent reduction of rates, shortening of terms and lowering of the requirements for graduation, whereby both the profession and the public are injured.

Ambitious and deserving men, unappreciated by the community, and anxious for immediate recognition and reward, observe the success of inferior physicians connected with medical institutions, and attributing their preferment to the wide-spread publication of their connected specialties and professorships, establish clinics or dispensaries, advertise that they will treat the poor gratis, and in this unprofessional manner seek success. As this course renders the *individual* amenable to discipline under the Code, common justice demands similar censure and condemnation for a college faculty in like manner transgressing.

It may be taken for granted, that the professional corps of every respectable medical school is composed of men, who consider themselves bound by the requirements of the Code and who are ready to apply its provisions in preservation of professional honor; yet the annual circular and the daily announcement of each medical college conveys to the public, far and near, individual advertisement over signature and location of a specialty and professional proficiency in that specialty, to the injury of less famed medical brethren. And not only is this advantage thus obtained, but by the same means the entire faculty is glorified in its published connection with an institution of learning, in which the facilities for obtaining instruction are set forth in glowing terms, with pictorial illustrations of the college building, its amphitheatre, its laboratory, its dissecting room and its dispensary, where the clinical professors treat so many cases of disease and perform so many surgical operations; thus violating the

Code by advertising, by advertising specialties, by circulating hand-bills and by virtually announcing that the poor are treated gratis.

Whenever the equality of rights and duties of medical men is disregarded, and the restrictions of the Code which limit and protect us in our relations to each other, to the profession and to the public, are annulled by reason of fictitious claims to license or favor, the organic law will cease to inspire respect or obedience.

With regard to the second resolution your committee, realizing the fact that objectionable college circulars have been published from time immemorial, and have received the sanction of custom and usage, recommend that a suitable declaration and testimony be prepared and forwarded to the National Medical Association, requesting authoritative action at its hands, in condemnation of the unprofessional features of college announcements.

Salicylic Acid in Cerebro-Spinal Meningitis.—At the end of an interesting article on the above subject, in the *St. Louis Courier of Medicine*, February, 1884, Dr. D. C. Ramsey, of Mt. Vernon, Ind., after tracing the pathological analogy existing between rheumatism and the disease named, makes the following conclusions :

1st. The analogy existing between rheumatism and cerebro-spinal meningitis would suggest and be good reason for the use of similar remedies in both diseases.

2nd. Salicylic acid being the best remedy, almost a specific in the treatment of acute articular rheumatism, would be a strong indication for its use in cerebro-spinal meningitis.

3rd. It produces a marked reduction in the temperature; the fever being thus lowered, the tissue-destruction and the onward progress of the inflammation is checked, thereby giving the patient rest.

4th. It controls the intensely annoying metastatic pains of head, back, elbow and knee, giving the patient ease.

5th. It exerts a direct influence for good over the inflammation itself, and can be taken in frequent large doses without bad effect; having given a boy fifteen years of age half-dram doses every four hours for three or four days with the only result of a great benefit in all the symptoms connected with the disease, is, I think, conclusive evidence of its harmlessness.

6th. Its good effects are soon apparent, and it does not interfere with the use of other measures of relief, as ice, blisters, etc.

7th. The best mode of using the remedy is to administer large doses frequently. For adults, begin on doses of fifteen grain, repeated every two hours, and increase the dose, as may be found necessary to obtain the desired effect, to *Dij*, at intervals of two hours, if need be. When the disease is under control, which will be determined by the reduction in temperature, relief of pain and placid countenance, decrease the dose, give at longer intervals, but still continue the use of it in small doses as long as the least symptom is present indicative of the disease.

Having never heard or read of salicylic acid being used in the treatment of cerebro-spinal meningitis, and my good success with its use in this fearful epidemic being afterwards verified by Dr. J. B. Weever, of this place, I hope to induce others to give this remedy a trial, and by so doing I think they will be enabled to see very happy effects from its use and thereby be highly gratified with the results.

Bronchocele Successfully Treated by the Seton.—We take the following from the *Canada Medical and Surgical Journal*, March, 1884: Mr. Henry Smith (*Lancet* January 5, 1884) reports two cases of bronchocele successfully treated by the seton. The first case was that of a man who had a great enlargement of the right lobe of the thyroid, which caused cough, dyspnœa, and general weakness, so that he could not attend to his duties. He was advised to have the tumor removed, but refused, so Mr. Smith, after puncturing the tumor with a small trocar, passed a needle around by a double hempen thread through the opening, carried it deeply into the substance of the swelling, and brought it out on the other side. The threads were tied together and left to act as a seton. Great local irritation was produced, accompanied with a free purulent discharge. As there was considerable fever, the seton was withdrawn and a drainage-tube introduced. The tumor gradually decreased, and the man left the hospital still wearing the tube. After a time it was taken out, and when the man was exhibited to the students, there was no appearance of the tumor, beyond a very slight thickening, and the man was in perfect health. The second case was that of a woman, aged sixty-eight, who had suffered from bronchocele for sixteen years. The tumor involved the whole gland, and produced much distress, with dyspnœa. A seton was introduced and left in for sixteen weeks; free discharge ensued, and the tumor rapidly decreased in size. The difficulty of breathing disappeared, and when shown to the students, there was hardly any trace of the tumor.

Although bronchoceles have been frequently removed, still, notwithstanding the greatest precautions, the operation is always a formidable and frequently a fatal one, so that the method advocated by Mr. Smith deserves trial.

Therapeutical Action of Nitro-Glycerine.—In the course of an article in the *Buffalo Medical and Surgical Journal*, March, 1884, Dr. C. G. Stockton writes as follows concerning this drug:

Observers are in accord that the action of nitro-glycerine resembles closely that of its congener, amyl nitrite. They both produce remarkable arterial relaxation—a chocolate-like color of arterial blood, a depression of the motor nerve centres and the pneumo-gastric, and muscular paresis.

Nitro-glycerine departs from the similarity in this, that it is slower and more prolonged in its action; it does not act as positively to lower animal temperature; the resulting arterial relaxation and flushing of the face is not so pronounced as is the case with nitrite of amyl. Without speculating over all the physiological actions of nitro-glycerine, it would perhaps be profitable to formulate our knowledge as regards its effects upon the circulatory system.

1st. It has a direct paralyzing effect upon the muscular coat of the blood vessels, especially the capillaries, producing relaxation of these, widening of the area vasculosa, thereby directly lessening arterial tension.

2d. While this action is peripheral, it undoubtedly is assisted by a similar accompanying centric influence, from depression of the vaso-motor centres.

3d. There is depression of the inhibitory powers of the pneumo-gastrics, and, as a result, the heart beats more rapidly while respiration becomes slower, death ensuing from asphyxia.

To state it in another way, we have from the influence of this agent great vascular relaxation, with increase of heart action, the efforts of the heart arising, partly, from the sudden capillary dilatation, the increased blood supply to those vessels making the heart labor to supply itself, and partly from the loss of the inhibitory function of the pneumo-gastrics.

Nitro-glycerine appears to be quite uniform and constant in its manifestations. It has proven successful in agina pectoris, and it has been employed with gratifying results in spasmodic asthma, bronchitis, sea-sickness, reflex-vomiting, whooping cough, migraine, epilepsy, the cold stage of inter-

mittents, acute and chronic Bright's disease, and numerous other affections.

A Case of Mistaken Sex.—From the *Medical News*, February 16, 1884, we extract the following, by Dr. William P. McGuire, of Winchester, Va.:

A. B., thirty-five years of age and in good circumstances in life, consulted me on January 12, 1884, in order to have the sex to which she belonged determined. She was to all outside appearances a fairly formed woman about five feet four inches in height, with long hair curling down her back. Her voice and features were effeminate, and her demeanor was modest. From birth her dress had been that of a woman. All of her associations had been with women, and her business in life that usually followed by that sex. There was no hair upon her face.

I found upon examination that the conformation of her thorax was similar to that of a woman, and that her breasts were developed similarly to those of a young girl. The nipple was erectile. Her arms, hands and lower limbs were like those of a man. There was a small penis in the natural position about three-quarters of an inch in length, with a well-formed glans and prepuce. It was capable of erection, but had in the glans no aperture. Following from the base of the penis backwards was a sulcus about one-half an inch in depth and two and a-half inches in length. Lying upon each side of this sulcus, and each enclosed in separate scrotums, were two well-formed and developed testicles, each attached to a moderate sized spermatic cord, the whole conformation resembling the vulva of the female. There was no opening in this sulcus, but just at its posterior termination was an opening one quarter of an inch in diameter, which was the external opening of the urethra, extending backwards and upwards into the bladder. No prostate gland was found. She stated that all of her proclivities and desires had been masculine, and admitted that occasionally in her sleep she had pleasurable sensations followed by an ejaculation of a white fluid from the opening of the urethra, which was, of course an ejaculation of semen. There was no trouble in determining her sex. She was advised to change her dress to that of a man, and to attempt to have by a plastic operation a new urethra made from its termination in the perineum along the sulcus to the glans penis, in order to effect more convenient urination, as she is now obliged to do so in the sitting posture.

Primary Perineorrhaphy.—At the conclusion of an excellent article on the frequent necessity of this operation, in the *New York Medical Journal*, February 9th, 1884, Dr. Charles R. Crandall, of Portland, Me., gives the following consideration of the *modus operandi*. He says:

1. Etherize the patient fully. Complete anæsthesia tends to prevent fright, shock, and muscular contraction.

2. Place the patient in the prone position across the bed, with the buttocks drawn slightly over the edge, and have her limbs held by two assistants.

3. Syringe the vagina thoroughly with warm water, and pack it with two or three new clean disinfected sponges.

4. Control all bleeding vessels by torsion and all oozing by hot sponges, and bring the parts into perfect apposition.

5. Introduce silver sutures with a straight needle, held by a needle-holder. Enter the sutures about half an inch from the edges of the wound. Inclose enough tissue to afford firmness. Have the sutures emerge exactly opposite each other, so that position and pressure will be accurate. Conceal the sutures as much as possible within the tissues of the recto-vaginal septum. Enter the first suture well down below the wound, and the last one a little above the upper edge of the wound. Cover the twisted ends of the sutures with a piece of rubber tubing. Waxed silk sutures or catgut sutures may be used, and do not cause pain when being removed; but silver ones are best, for they cause less ulceration, do not hold septic material, and can be tightened or loosened at pleasure.

6. The wound now being neatly closed, place the patient in bed, bandage her legs together at the knees, and give her a hypodermic injection of one-fourth of a grain of morphia.

Assuming now that the primary operation has been carefully performed, let us note the steps of the after-treatment. It must be borne in mind that careful attention to details, the help of a good, intelligent, faithful nurse, and full co-operation of the patient, are highly essential to the success of the operation.

1. Keep the patient quiet upon her back as much as possible during the first three days, and do not let her sit up during the first ten days.

2. Have the napkins intended to absorb the lochia changed every two hours, and the bedding kept absolutely clean.

3. Have a warm, carbolyzed vaginal injection given every six hours, and see that the nurse knows how to give it. Have the vagina and genitalia thoroughly cleansed after each act of micturition.

4. Allow the patient to use the bed-pan at her pleasure; but, if she is unable to do so, have her catheterized twice daily with a new, clean, soft-rubber catheter.

5. Give her morphine sufficient to avoid pain.

6. Give her a light, restricted, liquid diet, composed largely of animal broths and beef-tea, during the first few days. Milk is objectionable in these cases, for it often generates a great amount of intestinal gas, tends to constipate the bowels, and creates a bulky, scybalous stool.

7. In cases of laceration of the second degree, induce a "soft movement" of the bowels on the third day with a saline laxative and enema of warm water, and insure a similar movement each day thereafter. It was formerly the practice to keep the bowels "locked" for seven or ten days, but it has been found that patients do better and success is greater when the bowels are allowed to move early and daily. In the first and third cases in my own practice, referred to previously, the bowels were moved by the third day, and success was perfect. When the bowels are confined for a week or more there is danger from intestinal irritation, fever, bulky stools, and rectal distension. In cases of complete laceration, all authorities formerly advised keeping the bowels closed for ten days; but now the view is changing, for it has been found that success is most frequent where the bowels move daily after the third day.

8. Keep the temperature of the room at about 70°; have good ventilation; avoid draughts; let in an abundance of sunlight.

9. Do all things to keep the patient cheerful, hopeful, and comfortable.

10. Remove the stitches about the seventh day. It must be borne in mind that union by first intention in the perinæum takes place early and rapidly, if at all, for the parts are held in firm apposition and are highly vascular.

The prognosis of primary perineorrhaphy, when properly performed, is favorable in almost every case.

The Treatment of Rheumatism.—In the course of a clinical lecture delivered by Prof. James Tyson, of the University of Pennsylvania, and published in the *Philadelphia Medical Times*, January 26, 1884, the lecturer says:

It used to be said that the best cure for rheumatism was "six weeks," by which was meant that there was no remedy which was of especial service in this affection, and that under ordinary circumstances it would get well of itself in six

weeks. Although this may have been true then, it is not true at the present time. There is no doubt that we have in salicylic acid and the salicylate of sodium remedies which greatly increase our power over rheumatism. We now take hold of a case of acute rheumatism with the greatest confidence. In my own experience I do not recall a single case of acute articular rheumatism coming under observation at an early period in which salicylate of sodium failed to bring about a cure.

My method of giving salicylate of sodium is to administer ten grains every two hours, and continue this until the pain has disappeared and the swelling diminished. After the disease has yielded, it does not do to stop the treatment, but the remedy must be continued for ten days or more, ten grains being given every four hours.

Salicylate of sodium is not the only remedy of service in acute rheumatism, and there are certain conditions which call for a modification of the treatment. When the patient has not been in a condition of previous good health, but has been depressed by unfavorable hygienic surroundings, it is often necessary to combine iron with the salicylic acid. At times iron alone is sufficient.

After a case has passed into the sub-acute form, how is it to be treated? Is salicylic acid of any service in this condition? It may be, although less certainly than in acute rheumatism. At the same time, I am apt to begin the treatment with salicylic acid; but the method in which I have most confidence is that by counter-irritation with fly-blisters. A blister one or two inches square should be applied over the various joints in succession, and the counter-irritation kept up for weeks. But it is not always necessary to resort to so formidable a remedy as blisters. Painting the parts with iodine will sometimes cause absorption of the fluid and the disappearance of the symptoms. The internal use of iodine and iodide of potassium is also resorted to in these cases. Iodide of potassium may be given in doses of ten grains three times a day, or Lugol's solution may be substituted and continued for a considerable length of time.

The question has probably arisen in your minds, Is salicylate of sodium of service in what is called muscular rheumatism? It is not nearly so useful in this affection as in acute articular rheumatism. Although I have known it to be occasionally of service in such cases, the best treatment in my experience for muscular rheumatism is dry and moist.

heat, and moist heat in the majority of cases. This form of heat is obtained by the use of hot baths. I have recently used, with much satisfaction, hot soda baths, in which from half a pound to a pound of washing-soda is added to an ordinary bath of hot water. This should be taken on going to bed. The use of dry heat is also of service. One of the most annoying forms of muscular rheumatism is the ordinary stiff neck. The best remedy for this condition is a gum bag filled with hot water, on which the neck should be laid on going to bed. In the majority of cases the pain will have disappeared before morning.

Causes of the Recent Glowing Sunsets.—Numerous suggestions have been made that the phenomena are the result of the diffusion through the whole atmosphere of the entire earth of ashes and cinders from the eruption of the volcano of Krakatoa, in the Straits of Sunda, which took place on the 26th of August last. This theory has the support of Professor Lockyer and other eminent men of science, and there is much to be said in favor of it. The principal objections to it are summarized in a remark by Mr. Proctor, "that we should have to explain two incongruous circumstances: first, how the exceedingly fine matter ejected from Krakatoa could have so quickly reached the enormous height at which the matter producing the after-glow certainly was; and, secondly, how, having been able to traverse still air so readily one way, the matter failed to return as readily earthward under the attraction of gravity." It will not do to limit our ideas of the effect that may have followed the eruption of Krakatoa by our knowledge of what has followed any other volcanic eruption; for the outburst at Krakatoa far exceeded in violence any event of the kind that is remembered in the history of man. Mr. W. J. Stillman, formerly United States consul in Crete, who has witnessed the explosions of two eruptions of the submarine volcano of Santorin, and has seen masses of rock weighing many tons thrown from a half a mile to a mile, and escaping gases expanding, after two seconds, into huge masses of cloud, at an elevation of from six to ten thousand feet, and then drifting away with the wind and dropping volcanic dust in its course, believes that on the enormously greater scale of the Krakatoa explosions the dust could have been thrown to the top of the atmosphere, there to drift over the whole earth; and he suggests that at such a height the distribution might be effected in twenty-four hours by a single revolution of the earth.

Mr. Proctor's second difficulty is met by Messrs Preece and William Crookes, who suggest that very finely divided particles of dust having an electrical charge of the same sign as that of the earth, may be kept suspended in the upper air for an indefinite period, by electrical repulsion; and Dr. Crookes adduces experiments showing how similar things have been done with electrified gold-leaf. Professor S. P. Langley contributes some interesting testimony on this point, which is based upon his observations on Mount Whitney, in 1881.—*From "Green Suns and Red Sunsets," by W. H. LARABEE, in Popular Science Monthly for March.*

Cold Douche in Intestinal Colic.—The *Medical Record*, February 23, 1884, says that Dr. Tepliashin (*Vratch*) eulogises the pain-soothing effect of cold irrigations applied to the belly in cases of abdominal colic. The purpose is obtained by directing to the painful region a thin stream of cold water from a teapot lifted a foot or a foot and a half from the abdomen. The author saw rapid relief, even to the most excruciating pains, after the internal administration of opium and subcutaneous injections of morphia had failed.

Diagnosis—Be Sure.—A professor, on one occasion, was lecturing to his class on the means of diagnosing disease by the external appearance, face, and other details of the patient. Expressing his belief that a patient before the class afforded an example of the practice in question, the professor said to the individual, "Ah, you are troubled with gout!" "No, sir," said the man; "I've never had any such complaint!" "But," said the professor, "your father must have had gout!" "No, sir," was the reply; "nor my mother either!" "Ah, very strange!" said the professor to his class; "I'm still convinced that this man is a gouty subject. I see that his front teeth show all the characters which we are accustomed to note in gout." "Front teeth?" ejaculated the patient. "Yes," retorted the professor; "I'm convinced my diagnosis is correct. You have the gout, sir!" "Well, that beats everything," replied the man; "it's the first time I've ever heard of false teeth having the gout! I've had this set for the last ten years!"—*College and Clinical Record.*

Tongue and Gums—Indications.—We take following from *The Analectic*, January, 1884. A red line on the gums, with fetor and metallic taste, indicates pytalism; a blue line—lead-poisoning; great sponginess, with sloughing and great

fetor, scurvy; a red line about the teeth and along the gums—periostitis; purple gums and purulent discharge—necrosis; gums hot, red, swollen, very tense—phlegmon; gums inflamed and soft, with fluctuation—alveolar abscess; swollen gums, fetid discharge, mucous patches, shallow ulcers under the tongue, eroded palate, eruption of mouth, skin and scalp, gums everted, fetid matter from neck of teeth—syphilis. A white-coated tongue denotes febrile disturbance; a brown, moist tongue—indigestion; a brown, dry tongue—depression, blood-poisoning, typhoid fever; a red, moist tongue—feebleness, exhaustion; a red, dry tongue—inflammatory fever; a red, glazed tongue—general fever, loss of digestion; a tremulous, moist, and flabby tongue—feebleness, nervousness; a glazed tongue, with blue appearance—tertiary syphilis.—*Indep't Pract.*

Method of Dr. Carl Schroder's Gynæcological Operations.—Dr. James H. Dunn, in a Berlin letter to the *Northwestern Lancet*, February 15, 1884, writes as follows concerning operations in the new Kgl. Franenkliseik of that city: "The Director, Dr. Carl Schroder, is at present probably the best authority upon Gynæcology and Obstetrics in Germany, one of the best teachers I have ever heard; a vigorous, active worker in the prime of life (forty-five), and one of the most analytically scientific of the notoriously skeptical German investigators. I was told by an Assistant that his income from his profession amounts to more than one hundred and fifty thousand reichsthalers, or upwards of one hundred and ten thousand American dollars. A fair income considering the fact that the government furnishes him an elegant residence. Whether this estimation be correct or not it is generally admitted that Schroder has by far the largest income of any medical man in Germany. He is remarkably plain in his manner, speech, and methods of operating and practices scrupulous antisepticism. I was present at several laparotomies and was particularly struck by the simplicity, but thoroughness of his work. Six or eight practitioners are invited at a time to these operations, who must not have been attending septic cases or anatomical work. In one corner of the elegant little operating room, with polished stone floor and tiled walls, stands a porcelain stove, near which is a tripod bearing a mammoth atomizer. At one side an iron and marble table with a few jars of antiseptic solutions and a jar of drains, opposite a row of wash basins. The room is warm and the atmosphere completely saturated

or rather filled with a fog of antiseptic spray which penetrates every nook and corner of the chamber. The patient is wheeled in, chloroformed and ready for the operation. At the operators elbow is a small glass tray with a few instruments in a carbolic solution. One nurse manages the three sponges which he uses, one small and two large ones. A second, the needles and silk. He has but two assistants, one to give the chloroform and the other, Dr. Hoffmeyer, alone besides the operator is allowed to touch the patient. The instruments are few, simple and handled as little as possible, hence, he allows no assistant to hand them to him. I never saw more than 13 instruments in the tray, viz.: 1 scalpel, 6 artery forceps, 2 Museux's forceps, 2 pincette forceps, a Wealton's forceps, and a pair of scissors. A nurse manages the needles and holder. In one ovariectomy I noticed that he only used the scalpel and needles. He never uses a trochar, preferring to cut into the tumor and let the fluid run out over the abdominal walls, which are kept close to the tumor by his assistant. The pedicle is ligated in two parts and returned into the cavity of the abdomen. If there is no hemorrhage, he proceeds very rapidly. If there are adhesions he does not close the abdomen until hemorrhage is thoroughly stopped and its cavity well sponged out. Though very partial to mammoth drainage tubes in other operations, he does not ordinarily use them in ovariectomy, but closes the wound with strong, deep sutures, applied with very large curved needles, nearly three inches long. They are introduced at some distance from the skin wound and brought out just behind the edge of the peritoneum. In one case of a very large tumor with many adhesions, which gave troublesome bleeding, he put in a few strong stitches three inches back of the cut and tied them down upon buttons of sticking plaster. This he said was more particularly done to take up the bleeding parts within the sutures, as well as to take the slack out of the very loose abdominal walls. The dressing used is a straight Lister, *i. e.*, protective gauze, and mackintosh.

The case with which antiseptic principles are carried out, was forcibly brought out during the removal of the uterus by laparotomy. The operation is done with much the same antiseptic precautions as other laparotomies, but when the uterus, after the most painstaking precautions against hemorrhage, is cut through the cervix, its mucous surface is touched with a ten per cent. carbolic solution and the stumps so sewed as to turn the mucous membrane back

toward the vagina, the peritoneum is closed over the stump by carefully suturing, the rapid adhesion of this membrane quickly sealing the sac."

Book Notices, &c.

A Year-Book of Therapeutics for 1883. Edited by ROYAL W. AMIDON, M. D. 1884. 8vo. Pp. 250. New York. G. P. Putnam's Sons. Cloth. Price, \$1.50. (For sale by West, Johnston & Co., Richmond, Va)

This is one of the series of "Year-Books of Medical Progress" which the above-named firm offer to the profession, and, although well edited, there has been so little of genuine value offered during the past year as "advances" in therapeutics, that there can be hardly a demand for a volume of the kind. Every effort has been made, after a thorough search through current medical literature, to present whatever may be valuable and new in this branch of medicine, but the outcome is not great. Particular attention is called to the fact that not medical men, but "too enterprising wholesale druggists," have in general been the producers of novelties, and while we are willing to concede that many pharmaceutical preparations have been offered to the profession simply for the sake of profit, we still believe that the editor is too broad in his denunciation of that class. We have several firms who make a specialty of introducing new drugs—even before there can be any profit derived from their sale—that they may be carefully tested by physicians, and these should not be considered as "too enterprising. As is shown in this book, the greatest activity among therapeutical examiners during 1883, has been in the track marked out by biologists and pathologists, such as Pasteur and Koch, and new methods of treating diseases of supposed parasitic nature have been given considerable trial. So far experimental research has proven arsenic to be of some value in phthisis, while the bi-chloride of mercury has in most hands failed to do any good whatever in the disease. Two of the most interesting and practical articles in the volume refer respectively to the antiseptic value of corrosive sublimate as an antiseptic, and the physiological action of iodoform, and any practitioner interested in the latest notes on the newer medicines cannot fail to be pleased with a perusal of the work as a whole.

A Year-Book of Surgery for 1883. Edited by CHAS. H. KNIGHT M. D. 1884. 8vo. Pp. 197. New York. G. P. Putnam's Sons. Cloth. Price, \$1.50. (For sale by West, Johnston & Co., Richmond, Va.)

This is also one of the "Year-Books of Medical Progress," companion to the above, and in some respects a much more valuable one to the general practitioner; consisting of condensed reviews of the more important surgical contributions to the medical journals of the past year, and the editor has apparently exercised great care in the selection of articles best adapted to general reference. Great attention is of course paid to abdominal surgery, the advance in which has been so great, by reason of the impunity granted by our better modes of antiseptis, and statistics are given concerning the latest heroic operation—resection of the pylorus, with a full description of Dr. Loreta's method—twice successful—of "divulsion of the pylorus." Considerable activity was witnessed during 1883 in the surgery of the neck, extraordinarily successful extirpations of goitre (thyroidectomy) having been reported from France and Germany, the operations of the different surgeons being fully detailed in this book. Attention is given to the discussion lately going on in England concerning the use of the wire suture in transverse fractures of the patella, and the method of Lister—who is enthusiastically in favor of the wire—is given. Some new modes of treating other fractures are also described, and several pages are devoted to the consideration of digital exploration of the bladder. Nothing really new in syphilology appeared during the year, but the editor has collated considerable interesting matter concerning venereal diseases which will amply repay the reader. Altogether the volume is worth the modest sum asked for it, but it lacks that thing most needful—an index.

Elements of Modern Chemistry. By ADOLPHE WURTZ (Senator). Honorary Dean and Professor of Chemistry of the Faculty of Medicine of Paris, etc. Second American Edition. Translated and Edited, with the Approbation of the Author, from the Fifth French Edition. By WM. H. GREENE, M. D., Professor of Chemistry in the Central High School, Philadelphia, etc. With 132 Illustrations. London and Philadelphia. J. B. Lippincott & Co. 1884. 12mo. Pp. 770. Cloth. Price, \$2.50. (For sale by West, Johnston & Co., Richmond.)

Chemistry is rapidly making strides towards perfection. During the last twenty years chemical nomenclature has become so radically changed that the graduate of a score of

years ago, who has not kept himself posted as to the advances in this science would scarcely understand the symbols and the signs used to-day. This book will be a serviceable help to any who may be desirous of keeping himself informed. These "Elements" are well up to the modern status of information, and the progressive system adopted by the author in the arrangement and consideration of his subjects gives the book a usefulness that is not to be found in many works. The home student, with these "Elements" as his text-book, may become his own instructor. Dr. Greene, as the American editor, has done his part well—unless his remarks be too brief, and thus not sufficiently satisfactory to the student. Dr. Greene, however, does not show himself to be familiar with the Springs of the United States. For instance, he refers to the "Red and White Sulphur Springs of Virginia," when he evidently intended to these noted waters of West Virginia. Such minor errors will no doubt be corrected in the next American edition.

Plea for the Cure of Rupture. By JOSEPH H. WARREN, A. M., M. D., Member of the British Medical Association, of the American Medical Association, etc. Boston. James R. Osgood & Co. 1884. 12 mo. Pp. 117. Cloth. Price, \$1.25. (From Publishers.)

Dr. Warren deserves the gratitude of the afflicted, and the due recognition by the profession for his great discovery in the treatment in the cure of hernia. In this little work on "The Pathology of the Subcutaneous Operation by Injection for the Cure of Hernia," the author's chief object seems to be especially to make more familiar to the profession the special advantages of treating herniæ by hypodermic injections of oak bark infusions. This book is mostly the collection and systematic arrangement of papers already published in journals of Europe and this country on this very subject, and he presents a most instructive and valuable volume to the profession. In view of the wonderful successes claimed by Dr. Warren, his method of treating hernia should be more frequently undertaken. This book gives full directions as to how to proceed.

Different Aspects of Family Phthisis, in Relation Especially to Hereditary and Life Assurance. By REGINALD E. THOMPSON, M. D. London. Smith, Elder & Co. 1884. 12mo. Pp. 238. Cloth. (By mail.)

The title of this book well expresses its scope. It is of scientific value to students of medicine, but is of more posi-

tively practical value to the Medical Directors and Medical Examiners of life insurance companies. The cases, upon which the subject under present consideration is based, extend over twenty-five years, and the records are mostly derived from the Hospital for Consumption and Diseases of the Chest, at Brompton. The book shows the great importance of a study of hereditary influences, and it points out many facts that are not generally known. For instance, statistics support the statement that the inheritance from the mother is more disastrous to the male than to the female. Every page of this hand-book contains tables and statements of information, and the style of writing of Dr. Thompson is so inviting that one finds himself thoroughly in earnest in reading before he knows it, and he can't well help from going on. The author has had the best of opportunities for studying the matters brought to notice, as he has been so long connected with the world-famed Brompton Consumptive Hospital.

System of Oral Surgery. By JAS. E. GARRETSON, M. D., D. D. S., Dean Philadelphia Dental College, Surgeon-in-Charge of the Hospital of Oral Surgery, etc. Illustrated with Numerous Steel Plates and Wood Cuts. Fourth Edition, Thoroughly Revised, with Additions. Philadelphia. J. B. Lippincott & Co. 1884. 8vo. Pp. 1037. Cloth. Price, \$8. (For sale by West, Johnston & Co., Richmond.)

This is a magnificent work—*especially* useful to dentists and of great practical worth to surgeons and to country practitioners in particular. It contains sixty-seven chapters, and is thorough in all of its details of anatomy, physiology, diagnosis and therapeutics. Many useful suggestions to the general physician are found throughout the book—suggestions that relate especially to the relief of diseased and painful conditions connected with the teeth. We presume that all dentists who make even a pretence to a scientific study of their specialty will familiarize themselves with the teachings of this work. Many points of special interest to the general surgeon and physician are discussed with ability and instructiveness by the author, and the book will be found *valuable* to any medical practitioner. Our want of space forbids an attempt at a review or even a detailed statement of the subjects of the chapters. We heartily commend the book, and would specially suggest to those in need of a work on oral surgery to purchase a copy of this edition of the “treatise on the diseases of and surgery of the mouth, jaws, face, teeth and associate parts.” E.

System of Human Anatomy, Including its Medical and Surgical Relations. By HARRISON ALLEN, M. D., Professor of Physiology in the University of Pennsylvania, etc. Illustrated with 380 Figures on 109 Plates, many of which are Beautifully Colored. The Drawings by Hermann Faber, from Dissections by the Author. Also upwards of 250 Wood Cuts in the Text. SECTION V.—NERVOUS SYSTEM. Philadelphia, Henry C. Lea's Son & Co. Royal quarto. Price, \$3.50 per Section. (By mail, from Publishers.)

There is no work on Anatomy of recent issue that is comparable to this System, which will be completed in another volume or section—now about due from the publishers. The descriptions are accurate, the drawings are altogether reliable and well executed, and the text is excellent. The present section is devoted to the nervous system. The work is exceedingly valuable to surgeons, useful to practitioners in general, and indispensable to professors and other instructors of anatomy. The entire System, consisting of six sections, cost only \$20, and will last a life-time. We have noticed each of the four preceding sections as they reached us, and the more we examine them the more satisfied do we become with this admirable work.

The Medical Directory of Philadelphia for 1884. Edited by SAMUEL B. HOPPIN, M. D. Philadelphia. Presley Blakiston, Son & Co. 1884. 12mo. Pp. 205. Cloth, \$1.50. (For sale by West, Johnston & Co., Richmond, Va.)

This little book aims to give full information concerning the name, location, date and place of graduation, and office hours, of every reputable practitioner in the city of Philadelphia, together with the names and addresses of all dentists and druggists. The lists, as well as we are able to judge, are full and correct, but as errors are liable to be accidentally made in works of this kind, the publishers particularly request that they be notified of any discovered mistake or omission, that it may be corrected. In addition to the above lists, the location and object of every institution relating in any way to the practice of medicine and surgery, are fully given. The State laws interesting the medical profession are printed in full, and near the end of the book is a list of "Persons practicing medicine without diplomas," but who are allowed to practice under the clause of the registration act passed in 1881, which permits those to continue without graduation, who had been in active practice since 1876. We have seen no city medical register more complete than this.

Treatise on Bright's Disease of the Kidneys. Its Pathology, Diagnosis and Treatment, with Chapters on the Anatomy of the Kidney, Albuminuria and the Urinary Secretion. By HENRY B. MILLARD, M. D., A. M. With numerous Original Illustrations. New York. Wm. Wood & Co. 1884. 12mo. Pp. 246. Cloth. (From Publishers.)

After showing that Bright himself did not include all the conditions now named "Bright's disease" in his description, Dr. Millard says he prefers the word nephritis, which he uses mostly throughout his book. Very little of pathological and diagnostic value is stated by Dr. Millard that is not incorporated in the writings of others on the subject. In the way of treatment, the author's chief reliance, it would seem, is upon corrosive sublimate or calomel. Dr. Millard writes plainly, and seems to record only the facts as observed by him and reported for the first time in this little volume. We most cordially commend this work to the attentive study of practitioners, trusting that thereby we may be instrumental in saving some life or in relieving some one's diseased condition.

Medical Annals of Baltimore, from 1608 to 1880, Including Events, Men and Literature. By JNO. R. QUINAN, M. D. Pp. 274. 8vo. Paper. Price, \$1. Baltimore, Md. 1884.

This remarkable compilation is really invaluable to any one interested in the practice of medicine in Baltimore, as the fullest information concerning everything connected with the profession there has been gathered by the able editor. The book was prepared by request of the Medical and Surgical Faculty, of Maryland, as a memorial volume in honor of the sesqui-centennial of Baltimore, October, 1880. It comprises:

1. A chronology of events connected with the progress of medicine in Baltimore from 1608 to 1880.
2. A biography of Baltimore physicians, to which is appended a record of their literary contributions.
3. A subject index to the literature.
4. A record of public services, military, civil and medical, performed by Baltimore physicians from 1608 to 1880, in the City, State and National Governments, with statistics of the charitable and public institutions of Baltimore.

After private distribution among the members of the "Faculty" there remain about 500 copies which the committee has been authorized to sell at cost, one dollar per

copy, post paid. Orders should be addressed to the librarian, Dr. E. F. Cordell, 122 west Fayette street, Baltimore, Md.

Beyond its value as a work of reference, this book will always stand as a monument to the ability and unwearied industry of its editor, Dr. J. R. Quinan.

Grand-Pa's Fairies, or a Peep into the Mysteries of Nature.

By R. J. H. HATCHETT, M. D., Lunenburg Co., Va. Pp. 60. Paper. Price, twenty-five cents. Richmond, Va. The *Southern Clinic* Print. 1884.

This small volume is designed to give a little primary information concerning the elements, Oxygen, Hydrogen, Carbon, etc., in a pleasant way to children in the guise of faries, and the idea is very successfully carried out. Not feeling exactly competent to properly criticise the book ourselves, we read it to our eight-year-old boy and awaited his remarks. He said—"well that certainly is good. Why didn't *you* ever tell me about those things?" Every child that is old enough to understand fairy stories will be pleased with the contents of the book. We wish the author every success. It will be sent on receipt of price by the publisher.

PAMPHLETS, REPRINTS, ETC., RECEIVED for which we have no room for fuller notice, etc.; but most of which can be obtained by enclosing a letter stamp for pamphlet to the respective authors named.

A Review of the Operation of Gastrotomy for Myofibromata of the Uterus. With Complete Statistical Tables. By HORATIO R. BIGELOW, M. D., Washington, D. C. (Reprinted from the *American Journal of Obstetrics and Diseases of Women and Children.*) Pp. 80. A most complete review of the subject; the value of these very full statistical tables will be enhanced every year.

Naso-Pharyngeal Catarrh. By JOSEPH A. WHITE, M. D., Surgeon-in-charge of the Richmond Eye, Ear and Throat Infirmary. Read before the Richmond Academy of Medicine, March, 1883. Pp. 16.

Neurological Specialism. By W. J. MORTON, M. D., New York city. Presidential Address Delivered at the Annual Meeting of the New York Neurological Society, May 1, 1883. (Reprinted from the *Journal of Nervous and Mental Diseases*, Vol. X., No. 4. October, 1883.) Pp. 12.

The Comparative Merits of the Gypsum Jacket and Adjustable Supports in the Treatment of Spinal Affections.—The Pathology and Therapeutics of Uterine Displacements. Two Monographs by E. P. BANNING, SR., M. D. Revised and

Enlarged by A. T. BANNING, M. D. New York city. 1884. Pp. 32.

Twenty-fourth Annual Report of the Superintendent of the State Asylum for Insane Criminals, Auburn, N. Y. For the year ending September 30th, 1883. Pp. 44.

Medical Symbolism. By T. S. SOZINSKEY, M. D., Philadelphia, Pa. Reprinted from the *Medical and Surgical Reporter* of January 5th and 12th, 1884. Pp. 11. This little monograph treats of a very interesting subject concerning which we have little or no literature, and it is to be hoped that Dr. Sozinsky will in the near future find time to elaborate his article and give the profession a full volume upon the matter. He evidently has the material and the peculiar adaptability for the work.

Deterioration of the Puritan Stock and its Causes. By JOHN ELLIS, M. D., New York city, Author of "The Avoidable Causes of Diseases," etc. Pp. 52. In this monograph the writer has taken the ground that the American race is fast deteriorating, and the statistics given fully support his position. He points out the different causes very clearly, and shows where the true safety of the race exists. Altogether an interesting and valuable paper.

Use of Peroxide of Hydrogen in Diphtheria. By R. J. NUNN, M. D., Savannah, Ga., Physician to the Female Department of the Savannah Hospital. 1884. Pp. 16. This monograph contains a suggestion as to the treatment of diphtheria which we hope some of our subscribers will put to practical test and report their results.

Peroxide of Hydrogen in Suppurative Conjunctivitis and Mastoid Abscesses, with a Report of Two Cases. By A. E. PRINCE, M. D., Jacksonville, Ill. (Reprinted from the *St. Louis Medical and Surgical Journal*, March, 1884.) Pp. 7.

Aneurism of the Femoral Artery and a Knife Wound of the Intestines. By W. O. ROBERTS, M. D., Professor of Surgical Pathology and Operative Surgery in the University of Louisville, Ky. (Reprinted from the *American Practitioner*, October, 1883, and January, 1884.) Pp. 11.

Moral (Affective) Insanity—Psycho-Sensory Insanity. By C. H. HUGHES, M. D., St. Louis, Mo., Late Superintendent and Physician Missouri State Lunatic Asylum, and Lecturer on Nervous Diseases, St. Louis Medical College. (Reprinted from the *Alienist and Neurologist*, April, 1884.) Pp. 18. A most excellent article on the subject, and well worth reading.

Editorial.

The Medical College of Virginia.—An opportunity for a much needed re-organization of this *State* medical school will present itself to the Board of Visitors at its called meeting early in May. The recent death of one, and the resignations of three other Professors, leave four of the eight chairs vacant which are to be filled during this meeting. We hope the Board has at length come to see for itself that the College has of late years degenerated. The institution has become simply *notorious* in professional esteem. Its present position, as compared with the standing of the large number of reputable medical colleges of the United States, is a very unenviable one; and a last hope to restore the Medical College of Virginia to its former standing centres in the action of this meeting of the Board. This journal has, on several occasions, directed attention to some of the methods likely to do damage, in the hope of exposing wrongs which would lead the Board to investigate facts, and not rashly lend itself to commending errors. While our statement of facts has nowhere been contradicted, our motives have been misjudged, our views have been misrepresented, and the recklessness of the Faculty's actions has not received proper official investigation and condemnation. Such representative medical journals as *Le France Medical*, of Paris, the *Journal of the American Medical Association*, of Chicago, the *Medical Record*, of New York, the *Medical Times*, the *Medical News*, the *Medical and Surgical Reporter*, of Philadelphia, the *Maryland Medical Journal*, of Baltimore, the *North Carolina Medical Journal*, of Wilmington—these and other leading medical journals *outside of Virginia* have exposed some of the great wrongs done or attempted to be done the profession at large by this College, by its unexceptionable mismanagement.

During the late session of the Legislature of Virginia, when discussion by us of the questions involving this *State* school, might have again been misrepresented as having a political bearing, we refrained from comments. But now, for the medical institution we love, which years ago had a glorious record, and of which we should still have reason to be proud, we appeal to the profession—not to politicians—to bring about the reform so greatly demanded. Let earnest work be done to instruct the Board—few of whom are doctors—as to what are the main faults which have so nearly disgraced the College.

We have no personal feeling in this matter. We seek no favor at the hands of the Board. We have no revenge to gratify through the channels of public print. And when the College again learns "to do good, and not evil continually," it will then be our pleasure to give honest efforts at reformation all the influence our pages can afford.

Any suggestion to the effect that the recent talk about the Medical College of Virginia involves "a war of the outs against the ins," is a mistake. Unfortunately, some of the "outs" have been "ins," and knew too much of the internal working to secure their conscientious approval, and hence their resignations. It would seem that some of the College officials have combined to crush those who oppose their schemes, or who dare raise a voice in defense of their own ideas of right and wrong. "Close corporations" are formed to elect or reject professors and lecturers as they please, and go to Societies to eject officers who may not have "bowed the knee" to them. The maxim seems to be, "No means to conciliate, but all means to crush." But in the discussion of this subject, we disclaim all motives except the hope of saving the College from utter ruin, and the profession from further mortification—and to the latter we appeal.

The medical free-school system is an iniquitous one, and has been denounced by all the prominent journals of the country that have referred to the subject. But this College, in its recent appeal to the Legislature for an annual appropriation of \$7,500, promised that it would annually receive, *free of tuition*, as many medical students from Virginia as there are members of the General Assembly—one hundred and forty. Practically, the proposition was to take from the plow and anvil, from the workshop and factory, *unprepared* material to make doctors out of. The success of such a proposition would have closed the doors of the Medical Department of the University of Virginia, and, very properly, the friends of that time-honored institution of the Southern States denounced the scheme in unmeasured words, while they showed up the faults of such a plan by facts and unanswerable arguments. It would have flooded the State with incompetent doctors, and the profession with men, who, unable to support themselves by fair competition with worthier practitioners, would have been compelled to resort to discreditable efforts to gain position or practice. Thus our asylums and hospitals, our almshouses, and other professional offices, under the bestowal of political rule, would have been filled by totally incompetent surgeons and physi-

cians. Public interests would have suffered when the profession at large in this State is struggling to give the people worthier and abler doctors, as shown by the acceptance of an imperfect "act of the General Assembly," establishing a State Board of Medical Examiners.

Of its own motion, the Faculty of this College last year determined to advertise the acceptance of one *free-of-tuition* student from each State Senatorial district, of which there are *forty*. The over-liberal policy adopted, of course, brought in many other applications for free, or greatly reduced tuition fees. Hence there were about *eighty* matriculates during the late winter session of the College. But, according to our best information, there were not materially over ten—if so many—full cash, tuition-pay students for the session. What was the result? Some students not acquainted with the facts, and who would probably have gone to the University of Virginia as pay-students—all things being equal—were doubtless misled into attendance upon the course at the Richmond College by the advertisement of free tuition. And yet the University of Virginia this year has from 60 to 70 medical matriculates from all parts of the South, who claim the privilege of paying for what they ought to purchase.

Some three years ago a meeting of the Association of the Medical Colleges of the United States was held in this city during the session of the American Medical Association. During this meeting, the Virginia Colleges agreed to keep up six months' terms of session, charge their full rates of tuition, unless in exceptional cases, etc., etc. Look what a fall in less than two years afterwards, so far as relates to the Richmond College! Instead of being charitable to the few worthy and needy, it actually went to work, in practical violation of its voluntarily assumed obligation, and directly or indirectly advertised for *forty* free-of-tuition students from the State of Virginia alone. Under such circumstances, it becomes a natural inquiry with the disinterested, how many *special* reduction offers were made to other students? To such a question, we can make no answer. Can the medical press, hearing of such an outrage, done without the State's sanction, knowingly remain quiet? We appeal to the Board of Visitors, at their approaching session to inquire fully into these matters of common report, and if there be just ground for the popular belief in any of the many detrimental rumors, let the Board act as becomes their duty. Let each member of the Board, as he comes to the meeting in May, ask himself, Why does the College resort to such "tricks that are

vain" in order to get students? Did it have to do so years ago? Its benches were then full; its graduates stood high—wherever they went; its diploma was an honorable thing in the hands of the owner. What a change now! Some of the former graduates have announced their intention of going elsewhere to obtain diplomas from colleges they can respect. Some of the students of the last session have asserted they do not wish to stay longer—that they desire their certificates of graduation from better managed institutions. Why is it the College has deteriorated? Prof. Cunningham quit; McGuire left; Manson abandoned it in despair. Need our readers be told who Cunningham, McGuire and Manson are, or why, when in full health and strength, they gave up their places as Professors? Who that is available is left to fill the vacancies occasioned by the withdrawal of such men? Echo answers. We doubt whether a majority of the Board of Visitors is aware of the ordinary courtesy to a retiring distinguished Professor—that of being elected *Emeritus Professor*. There are only two or three doctors on this unusually large Board of about nineteen members.

There are now four vacancies to be filled. Dr. McCaw's resignation leaves the chair of Practice vacant. Dr. Coleman's death left the chair of Obstetrics without an occupant. Dr. James, the late Dean of the College, has resigned his position as Professor of *Materia Medica* and Therapeutics, etc. Dr. Tompkins' resignation leaves a vacancy as Professor of Anatomy. From what we have been able to gather from the daily papers, the two last-named gentlemen have resigned in the expectancy of securing the places left by Dr. McCaw's positive resignation from the Faculty, and Dr. Coleman's death. It is the duty of the Board to inquire into the suitability of each applicant for professorships. We do not know who are to be candidates for all the vacancies; but with an excellent opportunity to break up cliqueism and "close corporations," and clandestine caucuses, and combinations to restrict the right of independent thought and honest and responsible expressions of opinion, etc., we caution the Board to be very careful in their elections. It is not unusual for such Boards to call from other States or communities men to occupy positions in a Faculty—notwithstanding the self-nominated candidates, who by dint of industry, have secured eminent testimonials.

We fear that no man except a protégé of the Faculty will apply for any of the chairs. Since the war, no man not a resident of this city at the time of his election, has been a

Professor in the Medical College of Virginia. Why? It seems that the Faculty did not want him—except, perhaps, in an exceptional instance. What has the Faculty to do with nominations to the Board of Visitors? The coalition of Faculty and Board brings about a contracted notion of the real wants of the College, and renders the Board useless.

Is the *Faculty* to control the *Board* or the *Board* the *Faculty*? If the Faculty is to make its own appointments as successors in office; if it is to manage the State's annual appropriation as it pleases, without proper report to, or investigation by the Board; if rumors of general misconduct by the College are to become notorious throughout the country, and if neither the present remnant of a Faculty nor the Board of Visitors is able, or willing to face the facts, or to correct the errors, or to bring the College back to a reputable stand among the medical colleges of the country, then we say that, both the remains of the Faculty and the entire Board should resign, as a matter of respect to public opinion.

It is truly painful for us to write thus regarding an institution on whose register we once felt proud to have our name enrolled as a student. But *then*, Joynes, Gibson, Tucker, Conway, Petticolas, Wellford—the father of the present Professor Wellford—and McCaw—the recently resigned Professor—composed the Faculty. But who are their successors in office, or soon to be elected? We watch the result with an anxious hope that truly representative men will be brought to the front—regardless of the wish of the Faculty.

We do not believe that the Board of Visitors, made up of honorable gentlemen, know the facts to which we have but partially alluded, and others to which our space does not permit us to refer. For the most part, they are not physicians, and hence are easily misguided by personal and friendly influences, and expressions of wishes from the members of the Faculty. The College has gone down, in our belief, mostly because the Board of Visitors has not done its duty. Without intention to do wrong, but not knowing what to do, on the occasions of their few meetings, they have consulted the Faculty, instead of finding out what was demanded. Hence the Faculty got into the habit of making recommendations which were blindly voted upon by the Board, until the Faculty itself assumed the uniform of a close corporation and manages the Board.

Now that vacancies sufficient exist, which, if properly filled, might restore the College to a reputable position

among other medical colleges of the United States, we remind the Board, and appeal to the profession to enlighten the Board, to thoroughly re-organize the College. Elect good and true men. Do not confine selections to doctors of this city, but elect professors, according to their ability, from *any* community, to fill the chairs and make the College again an honor to "old Virginia" and the South.

The New (Virginia) Asylum Appointments.—At the annual meeting of the different Lunatic Asylum Boards this month the Readjuster appointees were required to resign, and new officers elected. At the Western Asylum, Staunton, all of the old medical officers who were thrust from their positions two years ago by the politicians then in power, were restored, and we honestly believe that no better appointments could have been made than Dr. A. M. Fauntleroy, Superintendent, with Drs. William Hamilton and Edward C. Fisher as Assistant physicians.

At the Central Asylum, the only lunatic asylum for negroes in Virginia, located for the present in Richmond, the old Superintendent, Dr. Randolph Barksdale, and his first Assistant, Dr. Robert G. Cabell, Jr., were restored—both excellent officers. Dr. R. H. Jones, of Petersburg, with whom we are not acquainted, was chosen second Assistant.

At the Eastern Asylum, Williamsburg, an unexpected result occurred. When the Readjuster element came into power, Dr. Harvey Black, one of the best asylum superintendents in the South, held the chief position at this institution, and was displaced to give position to Dr. R. A. Wise. Instead of replacing Dr. Black as the profession hoped would be the case, the Board of Directors after a somewhat stormy discussion, elected Dr. James D. Moncure to the superintendency. As the restoration of Dr. Black to the position was found impossible, we can say with all truth that Dr. Moncure will fill the place admirably in his stead, as his experience—having been in charge of Pinel Hospital, of this city—makes him well suited to hold such an honor. Dr. John Clopton was elected to his old position of first Assistant, and Dr. A. Monteiro, of Manchester, begins his first term as second Assistant.

It is to be hoped, now, that our lunatic asylums will be forever lifted from out the dirty pool of politics, and that hereafter when a medical position in one of them is rendered vacant by death or resignation, the fitness of the applicant will be the only qualification thought of, and that he will

not be tried and judged by the name of the ticket he voted at a State election. We think the profession and the community at large should feel satisfied with the present appointments, although naturally on such occasions there are always some who may have had reason to expect honorable positions and who failed to secure them.

It is proper to add for Dr. Black that he was not an applicant for the place of superintendency of the Eastern Lunatic Asylum.

Errata.—The following corrections in the excellent paper of Dr. Thomas J. Moore, in the February number should have appeared in our last issue. Page 703, fifth line of second paragraph, read *wear* for "tare;" first line, page 704, read *rendering* for "undergoing;" fifth line, second paragraph, same page, expunge "s" from "portions;" page 706, ninth line, second paragraph, expunge "a" between the words "the" and "labor;" next line, after "himself)," expunge period and the capital "T" in "The," so as to make it read, "and the welfare;" fifth line from bottom, page 707, instead of "more," read *made*;" ninth line, second paragraph, page 708, expunge "in;" tenth line, second paragraph, page 711, expunge "the" after "into;" line eleven, page 712, read "plied" for "pliep;" same line, read "sternal" for "stunal;" two lines below, expunge "its" before "concavity;" page 714, third line from bottom of first paragraph, change "inches. Therefore" so as to read "inches; therefore;" second line, last paragraph, page 715, for "bi-ischiatic" read "bis ischiatic;" last line, same page, read *at* for "to;" second line, page 720, instead of "ensued from," read *followed*.

New York Neurological Society Officers.—At the annual meeting of the New York Neurological Society, held April 1st, 1884, the following officers were elected for the ensuing year: President, William J. Morton, M. D.; First Vice-President, C. L. Dana, M. D.; Second Vice-President, Geo. W. Jacoby, M. D.; Recording Secretary, E. C. Wendt, M. D.; Corresponding Secretary, W. M. Leszynsky, M. D.; Treasurer, E. C. Harwood, M. D. Councillors: E. C. Seguin, M. D., L. Weber, M. D., T. A. McBride, M. D., W. R. Birdsall, M. D., Graeme M. Hammond, M. D. M. J. Roberts, M. D., was the former Recording Secretary.

The Florida State Medical Association will hold its annual meeting in the city of Jacksonville, on Wednesday, June 4th,

1884, at 12 M. Essays are promised by the following physicians: Dr. R. B. S. Hargis, "Malaria and the Relations of Micro-Organisms to Disease;" Dr. R. P. Daniel, "the Tongue in Disease, and its Diagnostic Value;" Dr. C. J. Kenworthy, "Phthisis Pulmonalis." Dr. T. M. Palmer, Orator. Dr. E. T. Sabal, of Jacksonville, is President, and Dr. A. W. Knight, of Jacksonville, is Secretary.

The American Medical Association will meet in Washington on Tuesday, May 6th, 1884. The Committee of Arrangements are already at work actively and energetically in behalf of a successful and profitable session. Members preparing papers, essays, reports, etc., should forward title and synopsis of same to Dr. A. Y. P. Garnett, Washington, D. C., Chairman of Committee of Arrangements, at least thirty days before the meeting. The following is a list of officers: President, Austin Flint, Sr., M. D., of New York.

Vice-Presidents, R. A. Kinlock, M. D., S. C.; T. B. Lester, M. D., Mo.; A. L. Gihon, M. D., U. S. N.; S. C. Gordon, M. D., Me.

Secretary, Wm. B. Atkinson, M. D., Pa.; Assistant Secretary, D. W. Prentiss, M. D., D. C.

Treasurer, R. J. Dunglison, M. D., Pa.

Librarian, C. H. A. Kleinschmidt, M. D., D. C.

Chairman Committee of Arrangements, A. Y. P. Garnett, M. D., of Washington, D. C.

Chairman of Section on Practice of Medicine, J. V. Shoemaker, M. D., Pa.; W. C. Wile, M. D., Conn.

Chairman of Section on Obstetrics and Diseases of Women, T. A. Reamy, M. D., Ohio; Secretary, J. T. Jelks, M. D., Ark.

Chairman of Section on Surgery and Anatomy, C. D. Parkes, M. D., Ill.; Secretary, H. O. Walker, M. D., Mich.

Chairman of Section on Ophthalmology, Otology and Laryngology, J. J. Chisholm, M. D., Md.; Secretary, J. L. Thompson, M. D., Ind.

Chairman of Section on Diseases of Children, William Lee, M. D., Md.; Secretary, W. R. Tipton, M. D., New Mexico.

Chairman of Section on Dental and Oral Surgery, T. W. Brophy, M. D., Ill.; Secretary, Jno. S. Marshall, M. D., Ill.

Chairman of Section on State Medicine, Deering J. Roberts, M. D., Tenn.; Secretary, C. W. Franzoni, M. D., D. C.

The Committee on State Medicine consists of one member from each State, and one each from the Army, Navy and Marine Hospital Service.

American Medical Editors.—The annual meeting of the Association of American Medical Editors will be held in Washington, D. C., May 5th, at 8 P. M., in Medical Hall, Southeast corner of Sixth and F streets. The annual address will be delivered by President Leartus Connor, M. D., on "The American Medical Journals of the Future, as Indicated by the History of American Medical Journals in the Past." Dr. N. S. Davis will open the discussion on "How far can Legislation Aid in Elevating the Standard of Medical Education in this Country?" In which Drs. A. B. Palmer, Henry O. Marcy, L. S. McMurtry, C. H. Hughes, Frank Woodbury, William Brodie, A. N. Bell, William A. Atkinson, W. C. Wile, W. R. D. Blackwood, Henry Leffmann and Deering J. Roberts will take part.

All members of the profession, especially journalists and authors, are invited to be present and take part in the meeting. Dr. John V. Shoemaker, of Philadelphia, is Secretary.

Prof. Fordyce Barker.—A new honor is to be conferred upon this distinguished author and teacher. The Edinburgh University has, on the occasion of its tercentenary anniversary, decided to confer a limited number of degrees upon foreigners who stand at the head of their respective branches of study and investigation, and this time-honored institution of learning has invited Dr. Barker to attend and receive the degree of LL. D. The doctor sailed for England on April 2, 1884.

The National College of Pharmacy has had an unpleasant experience with the civil rights question during the past month. It appears that a young colored man, O. M. Atwood by name, applied for admission, and the majority of the class signed a petition begging the authorities of the College to refuse him admission, but the petition being entirely disregarded, and the student in question admitted, on Monday night, Nov. 26, the entire class, with the exception of eight, withdrew from the school.

U. S. Pharmacopœia.—Any person having purchased a copy of the U. S. Pharmacopœia of 1880, who desires a list of the corrections since made therein, can procure the same by sending a two-cent stamp with the application, to William Wood & Co., Publishers, 56 and 58 Lafayette Place, New York City.

"There is no period in a fond mother's life when she is happier than immediately after the baby has successfully cut his 1st 2th." The *Sanitarian* is responsible for that.

Prof. Alfred Stille will tender his resignation some time next month (May) as Professor of the chair of the Theory and Practice of Medicine in the University of Pennsylvania, which he has held for nearly twenty years. The reason assigned is his advanced age (over seventy years) and a desire for rest and recreation. No teacher in that great school has better deserved it. Five years ago Prof. Stillé offered his resignation, but, at the request of the Board of Trustees, withdrew it. It is probable that Dr. Pepper will succeed him in the Professorship.

Tongaline.—The following extract is from the January No., 1884, of the *Eastern Medical Journal*, Worcester, Mass.:

"We wish to call the attention of our readers to this new remedy for neuralgia and rheumatism. Having a case of neuralgia recently which did not improve under the ordinary treatment, we had Messrs. Bush & Co. order some tongaline for us, which we gave to our patient. It acted admirably, relieving the pain before many doses had been taken. Since then we have had occasion to prescribe it several times, and with the same good results.

We believe tongaline is destined to become 'the' remedy for neuralgia, and the testimonials from noted physicians and surgeons surely tend to strengthen such a prediction. Try tongaline and you will thank us for the suggestion."

Rival to Quinine for Chills and Fevers.—H. M. Grant, M. D., D. D. S., of Abingdon, Va., in speaking of "Iron-Alum Mass," says: "In addition to its other valuable properties, conceded by physicians eminent in the profession, the Seven Springs "Iron-Alum Mass" is a formidable rival to quinine for chills and malarial diseases. In some respects it is decidedly preferable. As a tonic and expurgative of malarial poisons, I believe it is superior. Would like physicians to try it and report results. There is something in it."

New York Polyclinic.—We have received the "Quarterly Circular" of the New York Polyclinic, a school of clinical medicine and surgery for practitioners, situated at 214 east 34th street, New York City.

The success of this institution, where the course of study

has been attended by over three hundred physicians within the first fifteen months of its existence, demonstrates the need which was felt for such a school. The management have lately purchased a magnificent property heretofore in part occupied by the *Polyclinic*, and by the opening of the next year's course in September, 1884, will have it thoroughly equipped for laboratory, clinical, and hospital work. This is a practical step in the direction of more thorough medical education.

Drugs and Medicines of North America is the name of a new quarterly lately received, devoted to the historical and scientific discussion of the botany, pharmacy, chemistry, and therapeutics of the medicinal plants of North America. It is not precisely a journal, but partakes more of the character of a continued treatise upon the subject, and will take a place not filled by any present publication. There can be no doubt of the value of a work of this kind to physicians, as no thorough attempt has heretofore been made to place before the profession facts concerning the full medicinal qualities of our native plants. Each number will contain thirty-two pages, the subscription price being \$1 per year, or 30 cents per copy. Edited by J. U. and C. G. Lloyd, 180 Elm street, Cincinnati, Ohio.

Surgeon-General of the Navy.—Secretary Chandler has formally recommended the nomination of Medical Director F. M. Gunnell as Surgeon-General of the Navy in place of Medical Director Wales, whose term expired January 23, 1884.

Sarco-Peptones.—This preparation of Dr. Rudisch, presented by the house of Parke, Davis & Co., is offered by them as a thoroughly successful peptonized beef extract. It is in the form of a translucent, firm jelly, of an amber-brown color and the odor and flavor of a good extract of beef. Dr. Jacobi, of New York, has used it for a long time in preference to any other preparation of the kind, his reasons being "the absolute uniformity and equality of the specimens, and the fact that the patients, as a rule, have been willing to take it for a long period in succession." He gives it unmixed in teaspoonful or half-teaspoonful doses every half hour, hour, or two hours, or diluted with broth, or spread on stale bread or toast, or mixed with water for rectal injections. We have not as yet tried the preparation, but propose doing so upon the first occasion which offers.

Dissecting Material.—The whole country has read with horror the confessions of the negro resurrectionist Ingalls, who murdered the colored Taylor family in Ohio, and sold their bodies to the Ohio Medical College in Cincinnati for dissection. Virginia may thank the present Legislature for the passage of an anatomy act which effectually precludes the possibility of such a crime.

Obituary Record.

Dr. Henry Latham, of Lynchburg, Va., died on April 12th, 1884, after having been confined to the house for several months from the effects of a paralytic stroke. He had been in active practice about forty years, and was nearly or quite seventy-seven years of age at the time of his death. He was well known to the profession of the State, and their respect for his ability and character was shown in the fact of his election at the session of 1879, at Alexandria, to the Presidency of the Medical Society of Virginia, which position he held during the session at Danville, in 1880. His memory will long be revered by those who knew him.

Dr. Latham was one of the organizers of the Medical Society of Virginia, and was one of its earnest friends and workers for the professional good of Virginia. Generous perhaps beyond his ability, faithful to trust and to confidence, active in every effort to do good, lenient in criticism as to the errors of his brother doctors, but bold in the denunciation of wrong whenever it became his duty to state an opinion, a good physician and a warm-hearted friend, he gained a reputation that is enviable.

The medical profession of Lynchburg, Va., had a meeting at which the following preamble and resolutions were adopted:

Whereas, God in his wisdom has taken from us our beloved friend and brother, Dr. HENRY LATHAM, and while we mourn his loss, we humbly bow our heads to this dispensation of the all-wise Providence; therefore,

1. *Resolved*, That the medical profession of this city has lost in his death one of its most distinguished members, who has successfully and laboriously practiced his profession in this community over half a century.

2. *Resolved*, That he has left us an example worthy of emulation in his devotion to the science and practice of medicine.

3. *Resolved*, That his genial disposition, cheerful spirits, intellectual vivacity, conversational powers and natural tendency to look upon the bright side of life, will be a source of pleasant recollections to his friends.

4. *Resolved*, That we attend the funeral in a body, and thus manifest our approval of the noble qualities that characterized his life.

5. *Resolved*, That the usual badge of mourning be worn by each one of us for thirty days, and that the chairman appoint six of his medical brethren to act as pall bearers in conjunction with such other persons who may be selected.

6. *Resolved*, That a copy of these resolutions be sent to the family, and published in the city papers, and also in the *Virginia Medical Monthly*, *Southern Clinic* and *Atlantic Journal of Medicine*.

Dr. James C. Green died at his home in Danville, Va., on April 1, 1884, after being confined to the house by serious illness for some time. By his death the profession throughout the State of Virginia sustains a great loss. His long and active life had made him known to practitioners of this portion of the South, and to those who had intimate acquaintance with him he was more than a physician—a much endeared friend. Although not as well known as he should have been from contributions to the medical press, he was the acknowledged leader of medical thought in his community, and his influence for the advancement of every good object in the profession will long be felt by those he leaves behind. He was a member of the Medical Society of Virginia, and from his early life till his fatal illness, he ever took a lively interest in its good. When it was suggested to him that he was desired for the Presidency of the Society, by what might have been regarded as an almost, if not in fact, unanimous wish, he positively declined the candidacy, with the over-modest statement that he had not done enough for the Society to entitle him to such a compliment. He was a great man; but his dislike for public notice prevented the bestowal of honors upon him to which he was entitled, and which the profession was anxious to bestow.

Dr. Lunsford Pitts Yandell died at his home in Louisville, Ky., on March 12, 1884, after an illness of but a few hours. During a number of years he had, at times, attacks of what seemed to be angina pectoris, and it was while apparently recovering from one of these attacks that he suddenly expired.

He was for a number of years chief editor of the *Louisville Medical News*, holding that position at the time of his death. Since 1869 he had held different professorships in the medical department of the University of Louisville, the last one being that of Theory and Practice of Medicine. Besides attending to his work as editor and teacher, he enjoyed a large and lucrative practice, being preëminently a *busy* man. He entered the Confederate army as a private soldier, but was soon called upon as Medical Director of Gen. Polk's

army by that officer, who knew of the reputation Dr. Yandell enjoyed as a Professor in the Memphis Medical College in 1859. During the civil war he held many official positions, and served with extreme credit until peace was restored. Born in June, 1837, he had hardly more than reached his best days of usefulness, and not only the community where he lived, but all who knew him feel called upon to mourn a most untimely loss.

Dr. Pliny Adams Jewett.—The profession of New England have sustained a serious loss in the death of this estimable physician at Providence, R. I., April 10, 1884. Born in New York State in 1816, he graduated at Yale Medical College in 1839, after receiving a diploma from Trinity (literary) College, Hartford, and pursued his studies in Paris for several years. He first settled in practice, upon his return, in New Haven, but soon after removed to the South, and established himself at Aitken, S. C., where he remained two or three years, at the expiration of that time returning to his old home, in the City of Elms, where he devoted himself mainly to surgery. For thirty-five consecutive years he has been the Attending Surgeon at the New Haven Hospital, and for twelve years he was Professor of Obstetrics in the medical department of Yale College. He has received all the honors possible to be bestowed by the local medical societies, becoming in 1876 President of the Connecticut Medical Association. He served throughout the war as surgeon in the Northern army, reaching a colonelcy by regular steps of promotion. His contributions to medical literature have been frequent, and his powers of analysis, and far seeing observation, made his articles eagerly sought for by the leading journals. Beyond his ability and reputation in the profession he was loyal and true in his social relations, and it might be honestly said of him that he never lost a friend once made.

Dr. George Engelmann died at his home in St. Louis, Mo., last month, during a severe attack of pneumonia, in the seventy-sixth year of his age. He was the oldest practitioner in that city, and began practice there on his arrival from his native place (Frankfort-on-the-Main) in 1832. He was one of the founders of the Western Academy of Science, and also one of the originators of the St. Louis Medical Society. In 1856, with others, he founded the St. Louis Academy of Science, and held the presidency of that Society for a num-

ber of years. He was deeply interested in botany, and continued its study while engaged in active practice, being quoted as an authority in many of the later treatises upon that science. Some idea of his industry and regularity may be gathered from a knowledge of the fact that for forty-seven years he made meteorological observations several times each day, only discontinuing the practice two days before his death.

Dr. Bethulial Keith, of New York, died March 13, 1884, aged seventy-three years, at Jacksonville, Fla., where he had taken a temporary residence. He was for many years the head of the well-known firm of manufacturing pharmacists, B. Keith & Co. He practised medicine in New Hampshire until 1852, when he began in a small way the manufacturing business which has since grown to such a magnitude. Several years ago he suffered from an attack of cerebral hæmorrhage, and since then had passed a life of rest and recreation in Connecticut and Florida, until a second attack terminated his life.

Dr. Alexander Wood, of Edinburgh, Scotland, died last month at his home in that city. Although the author of many able articles in medical journals, his chief claim to remembrance lies in the fact that although not really the inventor, he was the introducer of the hypodermic syringe. He took the clumsy Pravaz syringe of his day and modified and improved it until it assumed the almost perfect form of instrument now in daily use.

Dr. John Hutton Balfour lately died at his home in Edinburgh, aged seventy-six years. At the time of his decease he was Emeritus Professor of Medicine and Botany in the University of Edinburgh, Regius Keeper of the Royal Botanic Gardens, and Queen's Botanist for Scotland. There was hardly a learned society of eminence in the civilized world of which he was not either an active or an honorary member, although he was best known as an F. R. S. A versatile writer on medical and natural science, his life's work was in botany, and the writings by which he will be remembered are devoted to that branch of study. A deep thinker and a close student, he had little time to devote to social life, but in his moments of relaxation he took his mind entirely from his work, and became the youngest of the circle in which he moved.

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Original Communications.

ART. I.—**Morbus Coxarius.*** By WILLIAM H. COGGESHALL, M. D.,
Richmond, Va.

Hip joint disease—primarily and essentially a chronic inflammation of the bones composing the joint—classed by some as a tubercular arthritis, and by others as a purely local disease, is most commonly observed in children under fifteen years of age of a strumous diathesis, although Bryant found that out of 360 cases which he noted, there were 11 in which the age of the patient was above forty years. It is more frequently seen on the left side than on the right; a very small majority of the patients belonging to the male sex. Most authorities say that it may occur spontaneously, or without obvious cause, but Sayre taught that the disease is invariably preceded by some traumatism to the part, even when the history of the patient is deficient upon this point. Generally however a previous history of direct injury to the hip, such as a sprain, fall or blow, can be plainly made out when a careful examination is instituted.

The disease has been divided by writers into three distinct

*In response to a request made by several old and valued friends of the *Journal*, the writer has endeavored to prepare a short practical paper on the symptoms and treatment of this disease, striving to present an epitome of the subject in as small a space as possible. For more detailed information concerning the matter the reader is referred to any of the volumes named at the close of the article.

stages, each being characterized by peculiar symptoms relating entirely to that stage, the majority substantially making the division as follows:

First stage.—Before real pain begins, uneasy sensations, often looked upon as rheumatic in character, are located in the joint, and a stiffness of the joint on rising, and a partial limping or shuffling mode of walking is observed. These for a time mask the importance of the ailment and a home diagnosis of rheumatism is usually made. When pain is first noticed it is usually referred to the region of the knee, and the previous symptoms are magnified. At this time the pain is frequently periodical in its nature, being at its height about bedtime, and disappearing about night. The rationale of the pain at the knee is because of the distribution of the irritated nerves at the hip-joint, and this reflex phenomenon not infrequently remains as the principal symptom for weeks. Finally, however, as the inflammation becomes greater the pain extends along the nerve trunks from the knee up to the hip, being deep seated and of a dull, gnawing character, and is greatly aggravated if the articulating surfaces of the joint are forcibly pressed together. If at this time the patient is examined without clothing, it will be seen that the weight of the body is transferred to the sound leg, and a peculiar position is assumed by the affected limb. The thigh is flexed slightly upon the pelvis, the leg is flexed to about the same degree upon the thigh, and the direction of the foot is forward and a little outward—this instinctively relieving the sufferer—and it will also be discovered that the buttock on the diseased side is a trifle flatter and lower than its fellow upon the sound one.

Second stage.—In this, the peculiar symptoms of the previous stage just mentioned are exceedingly aggravated, and the quantity of the transudation into the intra-articular space is considerably increased, effecting a greater eversion of the foot, abduction, and often a fictitious or real lengthening of the limb. Very marked flattening of the buttock is to be seen, with complete obliteration of the gluteo-femoral crease. It is now that the general system begins fully to sympathize with the local disturbance, and febrile exacerbations occur,

simulating to a certain degree fever of malarial origin, the febrile excitement rising to its height toward evening, and passing off in a perspiration before daylight. The pain in the joint—sometimes still remaining also in the region of the knee—is increased, especially during the night; and violent spasmodic twitching or jerking of the affected leg is almost invariably present, constituting one of the important chain of symptoms of this disease. This is particularly distressing in the thigh muscles, but the general muscles of the hip and leg are often affected. The digestive apparatus is disordered, the appetite lost, and the general emaciation of the patient is plainly observable. Lameness is particularly marked. The patient usually has constipated bowels, is peevish and irritable, and presents a careworn countenance, but—although there is almost invariably more or less loss of sleep from pain or other causes—exceptional cases are occasionally encountered where little or no constitutional derangement exists. It is easily to be understood why the posture taken by the patient is felt to be a necessity, as the joint space is completely filled by the increased quantity of synovial fluid, and the extension pressure exerted by it within the capsule causes the extreme abduction, and afterward flexion and external rotation. During this stage abscesses not infrequently form, and curiously enough, they sometimes appear externally to the articulation—entirely free from connection with the bones of the hip.

Third stage.—In this stage there can no longer be any doubt concerning the exact nature of the affection, as great structural disorganization appears, with corresponding alterations involving ligaments, cartilages and the osseous structure of the limb. All the symptoms are characteristic of the extensive amount of destruction going on within the joint. Absorption of the acetabulum, or the head and neck of the femur, produces shortening which is plainly apparent. The formation of matter within the joint pressing upon the inflamed parts increases the suffering of the patient to a very great degree. The pain is no longer intermittent, but more acute in character, throbbing and persistent, great swelling in the gluteal region is perceived and œdema of the sur-

rounding tissues is marked, the subcutaneous veins being much enlarged and turgid. In certain cases as soon as the capsule is ruptured the pain is relieved, and a change takes place in the position of the limb. The adductor muscles resume their control of the leg, and marked adduction and inversion are seen. The position of the leg and foot depends greatly upon whether the acetabulum, or the head and neck of the femoral bone has suffered most severely. In the former case the foot is usually turned in, but in the latter a condition of eversion ensues, due to the action of the external rotary muscles. Abscesses continue, and the formation of sinuses may commonly be expected.

The amount of shortening is naturally extremely variable, depending entirely upon how much of the osseous structure is destroyed. It may be anywhere from one to five inches. Displacement or dislocation of the head of the long bone is of course easily discoverable.

Differential diagnosis.—Notwithstanding the well-marked symptoms of this disease, it is not infrequently—especially in the earlier stages—erroneously diagnosticated, the misleading pain in the knee often throwing the physician off his guard, even the eminent Gross acknowledging that he had been misled by it. The practitioner is called upon to make his diagnosis—according to the state in which he first examines the patient—between hip-joint disease and rheumatism, different spine curvatures, sacro-iliac disease, psoas abscess, Pott's disease, periostitis, and dislocation. A careful study of the differing points will prevent any egregious error on the part of the medical attendant, even if a case presents itself with some of the more prominent symptoms masked by a scrofulotic diathesis.

Treatment.—All authorities are agreed that the earlier the stage in which proper treatment is adopted, the more probable is the chance of recovery with a good joint, although that end has been secured even in the second stage, and the three advocated plans of treatment are epitomized in *rest in the horizontal position, rest with extension, and extension conjoined with motion.* There can be no doubt that complete rest of the affected limb as well as of the entire body is of pri-

mary importance, and that practitioner who secures the most perfect condition of absolute quietude of the diseased joint of his patient, together with proper attention to the general health, will have the most satisfactory results. Although different writers use and recommend means of their own invention to obtain the necessary rest in the horizontal posture during the early stage of the disease, any form of long splint extending from the axilla to the foot, and absolutely preventing any joint motion by turning or moving in the bed, is all that is required. The use of cups or leeches on the joint may often be of service, and painting with a dilute tincture of iodine, or raising a small blister, is recommended when tenderness of the affected part is specially complained of. As perfect a condition of general health as possible must be maintained, and every effort in the form of diet and amusement should be made to counteract the restlessness of the little patient ensuing from long confinement in bed.

If the patient is not placed under treatment until the second stage, and the limb is found to be in an unnatural position, it must be put straight under chloroform, and extension employed by means of a weight proportioned according to the age and strength of the child, say from three pounds up to ten pounds, more than the latter probably being absolutely harmful unless the patient is thirteen or fourteen years of age.* In this stage Gross employs an issue made with the actual cautery as near as possible to the most diseased point, and especially recommends the use of powdered morphia upon the sore thus formed to relieve the violent pains and uncomfortable twitching and jerking of the muscles. A free discharge of pus is to be kept up from the issue by a stimulating ointment, if necessary.

If, in the earlier stages, after six or eight weeks confinement, marked improvement is noted, the pain and tenderness subsiding, the patient feeling and looking well, slight motion of the joint no longer being productive of suffering, Sayre's hip-splint should be used, and exercise in the open air and sunlight allowed. By means of this valuable appa-

*Some surgeons use much heavier weights than this, even going so far as to apply an extension weight of fifty pounds to the foot.

ratus, extension and counter-extension are kept up and the child may walk about and lead a comparatively active life until entirely cured. It is difficult to say what surgical apparatus of greater benefit has been devised for afflicted children than the hip-splint of Sayre, since Dr. Physick first pronounced rest for the joint the *sine qua non* in treatment of morbus coxarius. Some surgeons, notably Hutchison, believe that by placing a thick weighted sole on the shoe of the affected leg and putting the patient on crutches, the weight of the limb itself affords sufficient extension in the favorable condition just mentioned, and the same principle is carried out in the method adopted by Agnew and Thomas, except that their apparatus also fixes the joint immovably.

It sometimes becomes necessary in the second stage to use the tenotomy knife, in consequence of the violent contraction of the muscles causing such pain and distortion, and it may be held as a rule that if the short adductors, the pectineal, or the sartorius, do not yield thoroughly under the relaxing influence of chloroform it is wise to divide them subcutaneously. Holmes thinks it is best not to open the abscesses which so frequently form in this stage unless there may be some special reason for so doing. He states that he has seen unmistakable abscesses disappear, and that even if they are to burst, it is better to allow the deep parts as long a time as possible to consolidate before the opening forms, but if an abscess is really increasing without sign of spontaneous evacuation the use of the aspirator is advisable. Most of the other writers upon the subject recommend the subcutaneous opening of deposits of pus, or if opened exteriorly, by means of an incision forming a valve, that no air may enter the pus sac.

In the third stage, when the bones are obviously diseased—shortening of the limb almost invariably existing—and abscesses are found in and around the joint itself, accompanied by hectic irritation, the plain indications are to evacuate the matter thoroughly by means of a valvular incision, repeating the operation as often as necessary, until all tendency to re-accumulation of pus has ceased, and the question to be considered now is whether it is possible for the patient to still

recover—with of course, ankylosis—or whether it best to perform excision. There is no doubt but that under proper medicinal and extension treatment patients have recovered with a stiff joint, even in this stage of disorganization of bone and tissue, and before the operative method is resorted to, the surgeon should give the case every chance of what might be called the spontaneous cure, but such measure should not be too long delayed. If the patient has all the opportunities for long continued rest and thoroughly efficient nursing, he or she certainly has a chance for recovery without serious surgical work, and in those instances where the surroundings are good it is well to wait for a time, but the caution given above may be well repeated—not to wait too long a time.

In these cases where an attempt is made to save the bones with ankylosis, every means of supporting treatment that offers any possibility of tissue-building should be considered. There is always present a hectic fever, and according to our latest knowledge quinine is the drug offering the best mode of combating this form of febrile excitement. Some preparation of opium must be used in connection with it to obtain its best result in such cases, and a good alcoholic stimulant should be regularly exhibited, a pure brandy being probably the best.

Cod-liver oil combined with the hypophosphites is an absolute necessity, many of the emulsions now in the market offering an excellent means of medication. Some writers, especially Gross, think highly of aromatic sulphuric acid, and there can be no doubt of its efficacy in the frequent hectic sweats. Some form of iron should also be employed. The diet should of course supply the largest amount of plastic materials of nutrition, being formed of milk, meats, eggs and strong broths, and in such cases where nutrition is imperfect and digestion weak, the writer has used and seen used with excellent effect, the preparation known as “beef peptonoids.” The sinuses usually found leading down to the bone must in any case be split open, and a careful search made for carious bone, all of which must of course be extracted, even if a large opening has to be made. The smaller

the incision for such purpose the better, to guard against undue loss of blood, and when only small pieces of dead bone are found—the main trouble lying in the existence of the tortuous sinuses—it has been recommended to inject into the canal weak solutions of iodine, permanganate of potash, nitrate of silver, or bichloride of mercury. Sayre's vertebral probe is a most excellent instrument for determining the course of the crooked canals which so frequently are found leading into the joint, and by careful manipulation the presence or absence of dead bone can usually be determined by it. After evacuation of abscesses, sinuses, or pus pockets, it is well to support the parts with something like soap or galbanum plaster, to secure a slightly stimulating effect.

When the surgeon finds that, despite all the care and attention given by himself and careful nurses, disintegration of the tissues is still active, and the parts in and around the joint are in such a diseased condition that recovery without operation is hopeless, then the only chance lies in excision. Notwithstanding the formidable appearance of operative procedure, the surgical treatment with the scalpel is by no means so difficult as might be imagined, and, given an operator with a good knowledge of the anatomy of the parts, and a fair assortment of well-prepared instruments, there should be no danger in the operation itself. It is sometimes far from easy to decide upon the exact period for the operative treatment, as cases have recovered even when very far advanced, and no conservative doctor wishes to expose his patient to the after-risks of an operation if it is possible to afford a cure without it, even with the unpleasant attendant of a stiffened joint. It may perhaps be offered as a rule however that in private practice more cases are operated upon too late than too early, and the practitioner must not wait until the strength of the patient is too far gone, and his powers of recuperation too nearly exhausted.

The manner of operating may be found in any work upon the subject, and may be briefly described thus. Perhaps the most convenient method is to make a curved incision five or six inches long over the diseased and displaced bone, and another at right angles over the great trochanter, then care-

fully separating the soft tissues from the bones, (and they will most likely be found very thin, consisting almost entirely of skin and cellular tissue, as the muscles which naturally cover the region during health have long since atrophied from lack of employment,) the chain saw, narrow saw, or pliers can be introduced, and the bone separated usually just below the trochanter, all diseased osseous structure being fully extracted. If at any time during the procedure more room is required, no hesitation should be felt in enlarging the primary incision, as an inch or two more in the length of a superficial cut adds nothing to the time required for healing a wound. When it is found that the acetabulum is diseased, every small particle of the carious bone tissue must be carefully extracted by means of the scraper and gouge, as a very small piece of dead bone left within the wound may serve to produce still more serious damage. After the operator is satisfied with the cleanliness of the parts, close approximation of the lips of the cut by means of two deep and a few superficial sutures will usually result in rapid healing of the wound. It is one of the essentials however that immobility of the limb should be secured after the operation, by means of splints, etc., exactly as in a case of acute fracture of the femur. If everything goes on well, the patient is pretty sure to recover a useful limb with a considerable degree of motion in the hip, and can afterward walk quite comfortably by means of a high-heeled shoe. When the patient is not seen by a competent surgeon until exhausted by long suffering and bad treatment, (and such cases have been reported) and vitality is at a low ebb, there is a possibility of recovery offered by hip-joint amputation. This of course is a *dernier ressort*, and although some few instances have been noted in medical annals of successful operation in this condition, yet the mass of statistics show fatal results, the patient not recovering from shock.

A great deal might be said concerning the medicinal treatment during the earliest stages, when the careful mother brings her child to the doctor because she has noticed some few disquieting symptoms, such as a little stiffness in the limb, or a slight change of gait. There is no doubt but that

such cases, in the hands of an ordinarily able practitioner, may be prevented from lapsing into the second stage. Beyond any mechanical treatment, and with all proper medicine, there is nothing from which such patients will derive more benefit than from plenty of sunlight and fresh air, especially if the strumous diathesis be present.

Where the little patient does not come under the hands of a competent practitioner until the later stages and there is a fair hope of procuring a cure with ankylosis, it is safe to be very guarded in answering questions as to the time required for complete recovery, and the utmost patience should be inculcated both to the parents and the sufferer—there being no such thing as a speedy cure. Nature requires a considerable length of time, even with the best assistance the practised surgeon can give, to quiet the great amount of inflammatory action which has been set up, some cases going on to a period of three or four years before recovery.

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Proceedings of Societies.

AMERICAN MEDICAL ASSOCIATION.

FIRST DAY—*Tuesday, May 6th, 1884.*—The Thirty fifth Annual Session of the American Medical Association convened in Washington, D. C. The meeting was called to order by the Chairman of the local Committee of Arrangements, Dr. A. Y. P. Garnett. After prayer, and the introduction of the President of the Association, Dr. Austin Flint, of New York, Dr. Garnett read the Address of Welcome.

The Committee of Arrangements presented a report announcing receptions, invitations, etc., tendered the Association. Letters from distinguished medical men in Europe and elsewhere, regretting their absence, were also presented.

President's Address.—Dr. Austin Flint, of New York, read his address, in which he referred to the natal period of the Association, and the reasons why it was founded and its continued existence. He set forth the objects of the Association, and dwelt at length upon each of them respectively. In proof of the progress of medicine, he pointed to the part recently shown to be played by germs in the production of disease, and said he would so alter Huxley's statement as to read: It is to be hoped that means will be found to destroy morbid agents outside the body, thereby securing prevention of disease, and that a means will be found to effect a destruction of these agents within the body, thereby arresting the course of disease.

With regard to the elevation of the standard of medical education, he thought more had been done than seemed commonly to be supposed, and quoted from the work done and the recommendations made at different times by the committee on this subject. He spoke of the importance of a closer union of didactic with clinical teaching, of increased demonstrative instruction in certain branches of medicine—such as histology, physical exploration, etc.—and of allowing more time for oral recitations. One of the most important matters in attempts to elevate the standard of medical education related to the preliminary requisites for entering upon the study of medicine. Among the requisites which had been recommended was some knowledge of Latin and Greek, and he thought no exception could be taken to such a recommendation as it related to medicine; but if one were about to enter upon the study of arts, or certain other educational

courses, the time spent in learning Greek and Latin might better be devoted to French and German. The practical question was, he repeated, What could the Association do toward advancing the medical profession? Before replying, it would be proper to speak of what was best not to do. Do not depreciate medical education in this country as compared with medical teaching and professional standing in other countries. As to the manner of medical instruction, it is more practical in many respects in this country than in Europe. Sweeping charges of venality and incompetence against medical schools were also improper. There was but little ground for the accusation that medical colleges resorted to disreputable means for obtaining students. There were advantages and disadvantages connected with the necessity for self-support on the part of medical colleges. Some of the evils complained of might be obviated by unity of action on the part of the medical profession. Suppose private preceptors recommended their pupils only to responsible schools, and that physicians received as pupils only those who, before entering upon the collegiate course, had received proper preliminary education. Let the National Association take the initiative step, and let it and State Societies work together and obtain uniform action in bringing about an improvement. But it should not be expected that all desired improvements could be effected at once. Dr. Flint briefly referred to boards of medical examiners, and pointed out a few objections to them.

With regard to the third object of the Association, the promotion of the usefulness, the honor, the interests, etc., of the profession, he confined his remarks to medical ethics. He spoke of the good influence which the code had had upon the minds of the profession, and quoted from the addresses of the ex-presidents. The Medical Society of the State of New York had taken precipitate action in changing its code of ethics—the portion of the national code which had been specially objected to relating to consultations with irregular practitioners. The interpretation of certain parts of the code at different periods seemed to vary more or less, although its intrinsic moral worth ever remained the same. With regard to the term irregular practitioner, Dr. Flint thought it should not be interpreted to mean one who might entertain exclusive ideas regarding certain matters in medicine, but rather one who adopted a sectarian name, as homœopath, eclectic, etc. It might prove hazardous to tamper with the code of ethics; but he thought it proper, with the advance

of time, to make interpretations of that code as it now stood. He would submit as a recommendation that the Association adopt resolutions embodying a more precise specification than the code furnished as to the grounds for excluding consultations with irregular practitioners, and he would approve of its being stated that those who adopted a sectarian name should be excluded from fellowship with the regular profession. As to the means for directing public opinion with regard to the profession, etc., let it be understood that there could be no antagonism between "humanity" and medical ethics.

Members should take special interest in the sectional work. In this connection, he recommended that steps be taken to have the International Medical Congress meet in this country in 1887. This recommendation had also been suggested or concurred in in letters which he had received from several gentlemen, among others Professor Samuel D. Gross, of Philadelphia, who was prevented from attending the meeting on account of serious illness. Dr. Flint paid a graceful tribute to this eminent surgeon.

Dr. Kinloch in the chair, Dr. J. M. Toner, of Washington, moved that a vote of thanks be tendered the President for his able address, and that it be requested for publication. Carried.

Dr. Toner also offered a resolution of sympathy for Dr. S. D. Gross, of Philadelphia, in his present severe illness, which was adopted and ordered to be telegraphed to Dr. Gross.

On motion by Dr. L. A. Sayre, of New York, a committee was appointed to invite the International Medical Congress, which is to meet in Copenhagen, to select the place of its next meeting in this country.

On motion by Dr. Garcelon, of Maine, amended by Dr. Fergusson, of Troy, N. Y., the recommendations contained in the President's Address were referred to a committee of seven, with the request to report upon them as soon as practicable.

Upon suggestion of Dr. Kellier, of Arkansas, the President ruled that none could be made members by invitation except those from regions not otherwise represented.

After some routine work, the meeting adjourned until 10 A. M. to-morrow.

SECOND DAY—*Wednesday, May 7th.*—The President announced the death of Dr. Samuel D. Gross yesterday afternoon, and stated that the telegram of sympathy did not reach

the family until after his death. Drs. T. G. Richardson, L. A. Sayre, J. H. Packard, F. H. Hamilton, Moses Gunn, W. T. Briggs, and I. Minis Hays were appointed a committee to report what action should be taken by the Association thereon. To this committee, on motion, the President was added as its chairman.

After the announcement of committeemen, the report of the Committee to secure more competent

Medical and Sanitary Service on Board trans-Atlantic Passenger Vessels was read by Dr. A. N. Bell of New York, chairman. The report was briefly as follows: After conference, correspondence and due deliberation, a bill was prepared and introduced by the Hon. Henry W. Slocum. The report referred to the contrast existing between the percentage of deaths on sea during the four years ending with 1873 and the four ending with 1883. During the former period there were 1,064,180 passengers carried, and 1333 deaths, or a percentage of .73 per cent. per thousand of the total number. For the corresponding period ending with 1883, the passengers numbered 1,127,215, the deaths reaching 1558, or .85 per cent. per thousand. This difference of .12 per cent. means that 225 lives would have been saved in the latter period had the sanitary conditions in that period been as good as in the former. In conclusion, he stated that the mortality is now three times as large as it should be, or would be, if the sanitary conditions of vessels were properly provided for.

Dr. Pratt, of Michigan, moved that the report be accepted, and the committee be continued, to report one year from the present time.

Dr. Irvin spoke at great length upon the manner in which a similar bill is now working in England, where he said that he was the first agitator of the movement.

The report was received and the suggestion adopted.

Dr. Pratt then presented the following:

Resolved, That the American Medical Association, now in session, urges upon Congress the necessity of providing suitable legislation to secure the well-being of immigrants coming to this country, and to protect our own public health.

Address in Medicine.—Dr. John V. Shoemaker, of Philadelphia, chairman of Section, after a few preliminary remarks on the difficulty of his subject, in consequence of new theories constantly advanced, said that in the field of pathology and pathological research the study of the infinitesimal had attracted great attention. The subjects prominently brought to the attention of the profession and exciting uni-

versal interest, more than any other, were those of the *bacillus theory* and the *contagious character of tuberculosis*. Only a few years ago Koch stood almost alone in advocacy of a *bacillus theory*. Now numbers of unbiased observers confirm his famous discovery. Foremost among these was Watson Cheyne, who visited Koch's laboratory for the express purpose of investigating the subject. His report fully confirmed the facts set forth by the great investigator, besides demonstrating the constant occurrence of the bacillus in all tubercular structures, as well as the relative position of the parasitic organism to cell-structure. Similar confirmatory evidence had been produced by Prudden, Dreschfeld, West, Gibbs, Heron, Wipham, Meissen, and others, from a clinical view of the constant presence of the bacillus in the sputa of phthisis; while Charnley Smith had even ingeniously demonstrated its presence in the expiratory air of consumptives by filtering it through gun cotton, dissolving the latter in ether, and then fixing it on microscopical slides for inspection. Dr. Austin Flint, Sr., accepted the new theory as well as the ætiological character of this micro-organism when added to predisposition, leaving the subject of contagion dependent upon the causative element combined with the favorable soil for its propagation, ascribing the usual absence of contagion to a lack of predisposition, and considered the presence of the bacillus as one of the most essential elements for the diagnosis of phthisis. Dr. Janeway, Dr. Welch and Dr. Peabody, well-known authorities on this subject, concurred with Dr. Flint; likewise Dr. H. C. Ernst, in his contribution presented to the Massachusetts Medical Society, besides numerous other investigators, both here and abroad.

The presence of the bacillus had been observed in other tubercular lesions than those of the lungs: as in the mouth and soft palate, by Guttman and Finger; in the skin by Cornil; in lupus by Demme; in the uterus by Lindsey Stephens; in the urinary tract by Rosenstein, Babés, and Cornil, as well as in rectal abscesses by Smith. Dr. Wilson Fox admitted the fallacy of his former experiments, and accepted the theory of the contagious character and inoculability of the virus, admitting that injury to the rodents was not followed by tuberculosis, as previously expressed by him.

Now, while the adherents to Koch's theory had increased wonderfully, there were not wanting those who opposed the acceptance of anything like a bacterian origin of tuberculosis or other diseases. Their opposition was based upon the result of years of observation and experiments, conducted

here as well as at the very birthplace of the bacillus theory. Among those most prominently arrayed against it were Spina, Finkler and Eichler, who pronounced the staining process of Koch fallacious and misleading, while Feltz admitted his failure with cultivation by following Koch's method. Formad, in this country, had made a most vigorous attack upon it, and had referred the ætiology of tuberculosis to histological changes rather than to parasitic invasion, in which deduction he was supported by many eminent pathologists, such as Longstreth and others. In his denial of the contagiousness of tuberculosis, he was in accord with Virchow, von Recklinghausen, Stricker, Gull, Williams, Watson, Paget, Humphrey, Richardson, Bennet, Hiram Corson, Trail Green, N. S. Davis, H. F. Campbell, and others.

The bacillus tuberculosis theory, however, was not the only one that had excited attention. The bacterial origin of other diseases had been earnestly advocated as well. Thus, a micro-organism had been found and studied by Friedländer as a micrococcus of pneumonia; and he thought it might serve to explain the occasional epidemic form of that complaint in certain localities. He mentioned numerous other diseases in which these micro-organisms had been discovered, according to Koch special honor for his skill in this field of research.

Our knowledge of *nervous affections*, though it had not progressed with the giant strides of other branches of medicine, was steadily advancing and emerging from its mysterious enfoldings. The localization of cerebral functions, though now generally accepted, had advanced us practically but little, though the trephine had daringly opened to the neurologist the hidden regions of dura mater and gray matter. Locomotor ataxia presented in its chronic state three diagnostic points for distinctoin: that of Duchenne; another depending on diffuse sclerosis of the cord and medulla oblongata; and a third was made of the ataxia of the periphery.

Speaking of *typhoid fever*, he inferred that the treatment by cold baths, of all antipyretics, was now thought to be the most serviceable, if we could trust to the statistics of recent investigators, as well as the thorough researches of Sassetzky in the analysis of the excreta.

Alluding to renal diseases, he asserted that *albuminuria* had long been the subject of scientific inquiry, being considered more and more of nerve origin. Its close relation to diabetes, with mutual interchange in certain affections, had brought forward the proposition that both albuminuria and glycosuria

might be produced by irritation of certain parts of the floor of the fourth ventricle. The hypertrophy of the muscular coat of the arterioles and the increased tension of the vascular system were also asserted to be due to irritation of the vaso-motor centers of the medulla. The latter, especially, had proved valuable in modifying the treatment of albuminuria. That the toxic influence of certain substances, as well as severe febrile affections, was productive of albuminuria was well known, and a recent instance had been cited where it occurred after varicella. *Peptonuria* had been investigated and found to co exist with suppuration from various causes, or with large exudations. Speaking of the disease known as *actinomycosis*, and as being peculiar to horses and cattle, he stated that it had been exhibited by Treves in a man whom he brought before the London Pathological Society. All stages of the disease, from minute solid growths to large suppurating and sloughing masses, were present.

Trichiniasis was with us a very rare disease indeed, in comparison with its frequent occurrence in continental Europe. In spite of the prohibitive edict against our pork in Germany, quite an endemic of trichiniasis had prevailed there of late. As there had been isolated cases reported with us, he would refrain from any attempt at defense, but would simply remark that the mortality from trichiniasis in this country, in comparison with Germany, would lead us most certainly to discriminate in favor of our product to that of the foreign—even if we did not attribute our comparative immunity to the more civilized manner in which we partook of it than the semi-barbarous fashion of eating it uncooked. French physicians, in the Academy of Medicine, of Paris, had already given their opinion that American pork was not so dangerous as the trichiniphobist would have us believe, and recommended that the prohibition of its importation be removed.

As to *therapeutics*, he gave a list of some of the chief remedies which had found approval during the past year, such as kairine among the antipyretics; paraldehyde; the *Abrus precatorius*, the jequirity bean of Brazil; the salts of nickel, and especially its bromide; bismuth salicylate; nitro glycerin; the chlorides of gold and sodium, etc.—in connection with them mentioning the diseases to which they were applicable. Treating of antiseptic inhalations, he thought that the vast research in the field for micro-organisms as causative elements of disease, and the discoveries made therein, had given a new impetus to antiseptic treatment in every branch.

Antiseptic inhalations for pulmonary disease had proved of value, whether the germ theory was sustained or not.

He directed the attention of those entering the profession to the necessity of thoroughly mastering the details of all its different branches—above all, that of general medicine, before entering into any specialty. He spoke of the desire on the part of a few to form exclusive organizations, which he argued were highly detrimental, and denounced them severely, saying that medicine, to be beneficial to humanity, must be open to one and all; and if its practitioners were to be excluded from medical societies and their meetings—not from a lack of knowledge and good standing—such societies had outlived their usefulness. Special studies might be made by physicians in certain directions, but the advantages of their research and study must be verified by their practical demonstration through the general practitioner. Without a thorough knowledge, specialism availed little. This powerful organization should represent every branch and specialty of medicine, and its knowledge should be open to all its members. Outside organizations on special subjects would detract from the interest and advantages of our meetings, and the younger members, neglecting the general subject of medicine, dazzled by the apparent brilliancy of a select few, would wander forth to ultimately destroy their own usefulness. The American Medical Association was the representative body of the medical profession of this country, and had been organized and conducted by gentlemen who had grown gray in its service, and whose brows were adorned with chaplets most worthily won, not only at home, but abroad. Our young men should learn that knowledge must come to them by the co-operation of their professional brethren from all parts of the country rather than from a few, who, in their exclusiveness, set themselves above the active members of the greatest and most humanitarian of all professions.

Address in Obstetrics and Diseases of Women.—Dr. T. A. Reamy, of Cincinnati, chairman of Section, departed from custom and read

Notes of 231 Cases of the Operation for Laceration of the Cervix Uteri.—The date of his first operation for lacerated cervix—"Emmet's operation"—was February 28, 1874. Of the 231 cases to date, not a single death has occurred. In 6 cases, peri- and para-metritis with general peritonitis occurred. In 3 of these 6 cases the symptoms were sufficiently severe to

cause material delay in complete recovery. In *one* of the cases among the *three*, para- and peri-metritis and general peritonitis were so severe that the patient was confined to her bed for three months, but ultimately made a good recovery. In 170 cases the laceration was bilateral; in 30 cases unilateral. Of the latter, 23 were on the left side, and 15 on the right side. In 16 cases the laceration was stellate. In 5 cases, of the posterior lip only; in 2 of the anterior lip only. In 80 cases the laceration was extensive. In 15 of these it extended to the cervico-vaginal junction on both sides; and in 33 of the cases of bilateral laceration the injury extended to the cervical junction. In 167 cases there was perineal laceration sufficient to leave a deformity. In 15 cases the anal sphincter was damaged; and in 7 cases the recto-vaginal septum was opened. In 50 cases he operated on the perineum after recovery from the cervical operation.

Dr. Reamy did not hesitate to curette the uterus at the time of operating on the cervix, nor to resort to it, if necessary, immediately with perineorrhaphy. He caused a stream of hot water to flow over the parts continuously during the progress of the operation, and never used sponges. He had not employed ligature or tourniquet for controlling hemorrhage, but allowed free bleeding from the denuded surfaces, because it softened and thus promoted absorption of the hardened tissues, and facilitated puncture with the needle carrying the sutures. To promote this absorption he regarded it as an important factor in starting the process of involution.

The usefulness of trachelorrhaphy, if properly done, could not be overestimated. Hot water had been so efficient in controlling hemorrhage that it had, in some cases, been necessary to withhold it, in order that sufficient bleeding might occur to soften the tissues before the sutures were introduced.

Among *the causes of laceration*, mention was made of the early rupture of membranes and attempts at forcible dilatation, with either the fingers or the improper use of ergot, as far more fruitful sources of the injury than the use of the obstetric forceps. Many cases occurred inevitably, and he thought the gynecologist should protect the obstetrician, and that such protection should be voluntary.

Dr. Reamy then spoke of the influence of injuries inflicted during parturition in producing cancer, and said that cancer of the uterus was a disease of child-bearing women, and that the fretting of exposed tissues was a prolific source of malignancy.

nant disease. In all cases of spontaneous healing of laceration of the cervix there was more or less of cicatricial tissue in the parts repaired. All cicatricial tissue, even if not producing reflex symptoms, should be removed thoroughly, so as to obtain union by first intention, in which cicatricial tissue has not been found, and thus remove a source of great danger of the development subsequently of serious disease.

Dr. Reamy then spoke of the *influence of the operation on sterility*. He knew of thirteen cases in which conception occurred after the operation, and in six of these he attended the women in subsequent labors, and laceration did not again occur. He believed that if the operation was properly performed it favored fertility and often cured sterility. Catgut sutures should not be used. In some cases reflex symptoms remained; in most cases they were benefited or entirely removed.

Method of Operation.—1. He uses nothing with which to draw down the uterus except a single vulsellum, seizing one lip at a time.

2. He draws the uterus down as little as possible.

3. He outlines the denudation with a sharp knife, and then cuts the tissues included in the line with sharp scissors, which prevents rolling of the tissues at the borders of the line of denudation.

4. He allows the parts to bleed freely, but according to the condition of the tissues the absorption of which he wishes to promote.

5. He uses a nearly half-circle needle, Chinese silk, and a plain needle holder. Silk sutures may be left in for fifteen to thirty days without danger of cutting out. The perineum may be perfectly healed before the cervical sutures are removed.

6. Wash out the cervical canal with a recurrent stream. Wash the vagina with carbolyzed hot water within an hour after the operation, and then the vagina should not be syringed until the sixth day, when it should be again washed out, and the syringe used daily until the patient was discharged.

Dr. Frederick Horner, of Virginia, introduced a resolution looking to the establishment of a *permanent fund for the families of deceased physicians*; but it was ruled out of order, as it was new business, which could not be entertained on the second day of the session.

Vivisection.—Dr. Henry Smith, of Pennsylvania, offered the following, which, after being warmly discussed by Dr.

Keyser of Philadelphia, and Dr. J. C. Dalton, of New York, were adopted with but one dissenting voice, that of a lady :

Whereas, It appears that an effort is being made to restrict by legislative action the practice of investigation in medical science by experiments on animals ; and

Whereas, In the opinion of this Association, such restriction is not needed for the guidance of medical men in their investigations, and would be an injury and a hindrance to the pursuit of medical knowledge and the improvement of the medical art ; therefore,

Resolved, That a standing committee of seven, with power to increase its number, be appointed by the President of the Association, to be known as the "Committee on Experimental Medicine of the American Medical Association," charged with the duty of opposing, by all legitimate means, any interference with the progress of medical science by unwise or illegitimate legislation.

The President appointed the following gentlemen as said committee ; Dr. William Pepper and Dr. James Tyson, of Pennsylvania ; Dr. Judson, of Maryland ; Dr. J. C. Dalton and Dr. Austin Flint, Jr., of New York ; and Dr. John S. Billings, of the army.

Advertising by Physicians.—Dr. Atwood, of St. Louis, on the part of the St. Louis Medical Society, memorialized the Association in a paper earnestly decrying the practice of physicians connected with medical colleges, dispensaries, etc., of taking advantage of their official position to advertise themselves, although in an indirect manner. The paper, according to the rule, was referred to the Judicial Council.

The Standard of Medical Education.—Dr. D. Benjamin, of Maryland, offered the following :

Resolved, That this Association earnestly urges upon all American medical colleges the necessity of elevating the standard of medical education, at least so far as to require a preliminary examination, a three-years' course, a registry of attendance, and practical demonstrations of diagnostic skill.

The motion was seconded by Dr. Brodie, of Michigan.

Dr. Garnett said that the ground had been covered in the President's address, and he moved that the resolution be laid on the table. The President put the motion to lay on the table, and it was declared carried ; but earnest objection was made to "squenching" attempts to elevate medical education, and it was stated that the President had neglected to call for the nays. The President then again put the question, a rising vote was taken, and the motion to lay on the

table was declared lost. The original motion was then earnestly supported by Dr. Henry, of New York, and after some further discussion was put and carried by a large majority. The President then stated that it was an oversight on his part if he had not called for the nays on the motion to lay the resolution on the table, and added that he was in sympathy with the original motion as adopted.

THIRD DAY—*Thursday, May 8th.*—After the opening exercises, the President appointed the following Committee to Nominate Trustees for the *Journal of the American Medical Association* to fill vacancies caused by those who retire this year: Drs. E. D. Fergusson, New York; W. T. Briggs, Tennessee; J. E. Reeve, West Virginia; J. W. Prewitt, Missouri; Geo. Peck, U. S. N.; Thos. Russel, Missouri, and D. W. Stormount, Kansas.

Report of Committee to Memorialize Congress Concerning a Fireproof Building for the Army Museum and Library.—The bill had been introduced in Congress, but no action had been taken. The House has increased the annual appropriation to ten thousand dollars. Report received—Committee continued: Drs. Austin Flint, T. G. Richardson, H. F. Campbell.

Dr. G. M. Sternberg offered the following resolution, which was adopted:

Resolved, That a committee of five be appointed by the President to petition Congress to make a special appropriation for prosecution of scientific researches relating to causes and prevention of infectious diseases. Money to be expended under the direction of the National Board of Health.

The following gentlemen constituted the Committee: G. M. Sternberg, A. L. Gihon, I. Minis Hays, J. C. Dalton, and J. E. Reeves.

Report of the Committee on the International Medical Congress.—The Committee unanimously favored carrying out the suggestion of the President, and recommended that a committee of seven be appointed, of which Dr. Austin Flint should be a member, whose duty should be to extend an invitation to the International Medical Congress at Copenhagen, to hold the next meeting in Washington, D. C., in 1887. It was also resolved that the committee shall have power to elect its own officers, and in case the invitation is accepted, to act as an executive committee, to make all necessary and special arrangements for meeting, solicit funds, and draw from the treasury of the Association a sum not exceed-

ing five hundred dollars, to defray preliminary expenses. Adopted.

Report of the Board of Trustees; the Association's Journal. The chairman of the Board of Trustees, Dr. J. M. Toner, of Washington, read a report which recounted at some length the financial condition of the Association during several years past, and the steps that had been taken toward founding a weekly journal. The Treasurer's report was also included. It was believed that at the end of the year there would remain in the treasury, over and above expenses, including the editor's salary, five hundred dollars. It was thought that the rule relating to advertising in the journal, which had been strictly adhered to, had lessened the receipts. As now published, the journal gave six times the amount of reading matter in the course of a year that had been contained in a volume of the "Transactions" as published before, and it was thought that, the financial condition of the journal having been found safe, it would prove even of greater value the coming year.

The *Editor's Report*, included in the report of the Board of Trustees, was made by Dr. N. S. Davis. It stated that calculations had at first been made on the basis of 2,500 subscribers, but that the actual circulation had been 3,436, of which 3,271 were among members and subscribers. The advertising had been slowly increasing, and the whole amount received from this source was estimated at \$3,000. The total income for the year had been \$18,547.50; and after all expenses had been paid it was thought there would remain a balance of \$500 at the end of the year. Dr. Davis believed that the financial condition of the journal was such as to enable him, should he continue to be the editor for another year, to widen its scope of usefulness by engaging correspondents in more of the large cities, and to justify him in devoting more time to its editorial management.

Dr. Toner then resumed the reading of the report of the board, which stated that the journal had, in his opinion, been conducted with economy, ability, and judgment, the best interests of the profession being kept in view, and its dignity maintained with rare discretion; and it was confidently expected that the experience gained during the past year would enable the editor to greatly improve the journal. Dr. Toner read a letter from Dr. Davis, received in April last, offering his resignation as editor of the journal at the end of the quarter, because he wished to be relieved of an onerous amount of labor on the one hand, and, on the other, because

he desired to free the board from all personal considerations connected with questions of future policy. The members of the board, with but one dissenting voice, had requested Dr. Davis to continue in the editorship for another year, and Dr. Davis had replied that the same motives which had led him to yield to the wishes of the board when it first requested him to accept the editorship would lead him to comply with their request again, but that he positively could not serve longer than the year. The board had received proposals from publishers in cities in different sections of the country to publish the journal, but none of them were so reasonable as that of the firm that now had charge of the publication, and the contract with that firm had therefore been renewed.

Dr. Packard, of Pennsylvania, offered a minority report, and stated that he had been given to understand that the financial condition of the journal was straitened, and that for that reason the editor had not drawn any of his salary. In his opinion, the journal did not approach in any way to the standard which the organ of the American Medical Association should reach. He was aware that there were difficulties in the way of starting a journal of this kind, but the defects of the journal of the Association had not become less marked during the nine months of its existence. The object of such a journal should be not simply to spread out the minutes of the Association over one year—it should be a wide-awake, high-toned periodical in every respect, and not a sectional or partisan organ of the Association. Such a journal could be carried on only by a thoroughly trained corps of editors, and at a place where there was access to medical libraries, and where the best auxiliary work could be obtained, such work being liberally paid for. He therefore recommended that the resignation of Dr. Davis, as editor, be accepted, and that the publication of the journal be transferred to some eastern city, Washington, Philadelphia, or New York.

A motion was made that the minority report be laid upon the table. The President ruled that the majority report should first be acted upon. An appeal having been taken and sustained, the motion to lay the minority report on the table was acted upon. Dr. Beach, of Ohio, called for the ayes and nays. Pending the arrival of the secretary's list of the names of the delegates, the Nominating Committee reported, after which the secretary announced that the motion to lay the minority report on the table had been carried—ayes, 191; nays, 74. A motion to adopt the majority report was then put and carried.

The *Nominating Committee* then presented the following list of officers for the ensuing year :

President.—H. F. Campbell, M. D., of Georgia.

Vice-Presidents.—J. S. Lynch, M. D., of Maryland; S. D. Mercer, M. D., of Nebraska; J. W. Parsons, M. D., of New Hampshire; H. C. Ghent, M. D., of Texas.

Time and Place of Next Meeting.—New Orleans, on the last Tuesday in April, 1885.

Judicial Council, to fill vacancy, 1886, J. K. Bartlett, M.D., of Wisconsin.

To fill vacancies caused by expiration of term of service, J. H. Murphy, M. D., of Minnesota; J. M. Toner, M. D., of Washington; W. Brodie, M. D., of Michigan; H. D. Holton, M. D., of Vermont; A. B. Sloan, M. D., of Missouri; W. B. Ulrich, M. D., of Pennsylvania; W. M. Beach, M.D., of Ohio.

OFFICERS OF SECTIONS—*Practice of Medicine*.—H. D. Didama, M. D., of New York, *Chairman*; G. M. Garland, M.D., of Massachusetts, *Secretary*.

Obstetrics.—R. S. Sutton, M. D., of Pennsylvania, *Chairman*; J. T. Jelks, M. D., of Arkansas, *Secretary*.

Surgery.—Duncan Eve, M. D., of Tennessee, *Chairman*; E. B. King, M. D., of Pennsylvania, *Secretary*.

Ophthalmology.—Joseph A. White, M. D., of Virginia, *Chairman*; Eugene Smith, M. D., of Michigan, *Secretary*.

Diseases of Children.—John H. Pope, M. D., of Texas, *Chairman*; S. S. Adams, M. D., of District of Columbia, *Secretary*.

State Medicine.—E. W. Schaeffer, M. D., *Chairman*; J. M. McCormick, M. D., of Kentucky, *Secretary*.

Oral and Dental Surgery.—A. W. Harlan, M. D., of Illinois, *Chairman*; J. Ewing Mears, M. D., of Pennsylvania, *Secretary*.

Trustees of Journal.—H. F. Campbell, M. D., of Georgia; J. H. Packard, M. D., of Pennsylvania; Leartus Connor, M. D., of Michigan.

Necrology.—J. M. Toner, of the District of Columbia, *Chairman*.

The Committee on Meteorology and the Judicial Council made reports which were of no general public interest.

The Address in Surgery, by the Chairman of the Section, by request of the author, was not read but referred to the Surgical Section. His subject was the "Effects and Results of Operations for Relief of Gun-shot Wounds of the Small Intestines."

FOURTH DAY.—*Friday, May 9th.*—Dr. J. C. Dalton, of New York, offered a supplemental report on vivi-section, favoring it, which was adopted.

Dr. Eugene Grissom, of Raleigh, N. C., moved that nominations for the vacancies hereafter occurring in the Board of Trustees of the *Journal of the American Medical Association* be made by the Committee on Nominations. Ayes, 31; nays, 10.

The *Committee on the President's Address* reported, through Dr. Davis, its chairman, that no explanation regarding the code should be made without deliberation.

Dr. Davis personally offered the following:

Whereas, Persistent misrepresentations have been and are being made concerning certain provisions of the Code of Ethics,

Resolved, That the President appoint a committee of five permanent members, to report at the next meeting of the Association such explanatory declarations on the subject as the committee may deem proper. Carried.

The *Committee on Nominations* changed the officers of the Section in Oral and Dental Surgery to W. W. Allport, M. D., President, and E. C. Briggs, M. D., Secretary.

After a long discussion, introduced by Dr. J. H. Packard, of Philadelphia, it was resolved that membership shall be acquired by any one received as a delegate, and that he shall remain a permanent member as long as he continues in good standing in the Society from which he is sent, and keeps up his annual dues.

Dr. Von Klein, of Ohio, proposed an amendment to the Constitution, providing that graduates from medical colleges which do not require literary education as a prerequisite to graduation shall not be eligible as delegates to the Association, but this provision shall not apply to medical officers of the army and navy. Lies over until next year.

Dr. Pratt, of Michigan, offered an amendment to the Constitution to the effect that hereafter the chairmen and secretaries of Sections be elected by each Section. Lies over until next year.

Dr. Jerome Cochran, of Mobile, Ala., proposed as an amendment that the Nominating Committee shall not nominate officers from their own numbers. Lies over until next year.

Address in State Medicine.—Dr. Deering J. Roberts, of Nashville, Tenn., after making a brief reference to the progress of State Medicine during the past year, took up the

subject of medical education and its relation to the State, and maintained that legislation did not help medical education. He asserted that in those States which had laws regulating medical education, the profession stood no higher than elsewhere. He cited the views of Dr. Drake and Prof. Huxley, and argued that every man had a right to have what medicine, or doctor, or person he liked. He defended the literary and scientific work of the American physicians. The speaker then urged the necessity of a better sanitary organization. The contest between the National Board of Health and the Marine Hospital Service was unfortunate for each party, and each was somewhat to blame. He thought the organization of the national board unwieldy, and recommended the establishment of an independent health department.

Dr. W. A. H. Coop, of Tennessee, entered his protest against the go-as-you-please style of practising medicine advocated in the address.

The address by Dr. J. J. Chisolm, of Baltimore, as chairman of the Section on Ophthalmology, etc., on "Usefulness of Special Knowledge and Desirability of Using Well-defined Special Medical Truths by General Practitioners" was referred to the Committee on Publication.

Address on Diseases of Children, by Dr. Wm. Lee, of Baltimore. Opposed to specialties as they are generally practised, it must be admitted, nevertheless, that the formation of a Section on Children's Diseases was eminently proper. Not only has our example been followed by the British Medical Association, but in these days, when the question as to division of labor in science is engaging so much attention, pediatrics must sooner or later hold that independent position which it deserves. Certain affections are met with in children only, and there are others common, it is true, to every period of life, but which are modified in peculiar ways when they occur in childhood.

Diphtheria.—Dr. Carpenter, on the etiology and treatment of diphtheria, endeavors to show how, by analogy, diphtheria and potato disease may be allied to each other; and then, after mentioning the influence of sudden rise and fall of temperature, effects of sewers, impure milk, etc., gives facts to prove how the germ upon which he believes diphtheria to depend for its development may be suddenly brought into activity, particularly amongst the poor, who allow their families to remain on wash-days in the steamy atmosphere of the rooms in which they not only do their work but likewise

sleep. He sums up this part of his article by classifying the conditions necessary for an outbreak of diphtheria under five heads:

1. The presence of certain forms of excreta.
2. Of an elevated temperature not much below blood heat, but below that requisite for the coagulation of albumen.
3. Of an atmosphere saturated with moisture, and probably also with (4) an excess of carbonic acid, or some other acid in the air by which the growth of the germ is determined, and (5) some other meteorological or electrical manifestation at present entirely unknown.

Dr. Reese has advised for the treatment of diphtheria a solution of bichloride of mercury in the proportion of one grain to four ounces of rain-water. He orders the patient, if old enough, to gargle and rinse the mouth every two hours, and take afterward internally a teaspoonful; should the disease be very severe it must be done every hour. Within fifteen or twenty-four hours the exudation will disappear, but will return unless the remedy is continued. This treatment must be kept up for a week or longer, the strength of the gargle and frequency of use being regulated by the effects produced, namely, nausea, vomiting, or purging. As long as the system is suffering from the poison these symptoms will be absent.

Dr. Seldon uses the cyanuret of mercury, one centigramme to one hundred grammes of water; dose, two teaspoonfuls internally every hour, day and night. Also, when children are old enough, allows them to gargle with a similar solution. He also treated two hundred cases of angina of the tonsils and fauces with the same solution, and always with good results.

Scarlet Fever.—Mr. R. W. Mullican, in a paper on the "Etiology of Acute Specific Disease," and also Dr. John Meredith, have brought forward some evidence to show that scarlatina may be evolved from diphtheria. Dr. Oxley attempts to show that scarlet fever is not a very infectious disease during the first two or three days, and says that this may be easily explained, if we only accept the theory that the fever depends upon specific germs being introduced into the body and bred there; and only becomes infectious after they are reproduced in the host and thrown off, either from the skin, throat, or other secreting surfaces. There are exceptions where the disease, when present even in a very mild form, may prove infectious very early in the illness; but this is probably due to the fact that, owing to the initial

symptoms being mild, this disease is only discovered after making considerable progress. *Rheumatic fever*, he says, may come on during the course of scarlet fever as early as the sixth or eighth day, or during convalescence, when we think our patient doing well.

In speaking of the treatment in this complication the Doctor strongly interdicts the use of salicylates, because the skin and kidneys are both desquamating and not in a fit condition to be called upon to do any extra work.

Tonge Smith, from an experience in treating 2,000 cases of scarlet fever, observed within the last three and a-half years, has become convinced that the incubation period does not last more than three days.

Cerebro-Spinal Fever.—Dr. J. Lewis Smith, in an exhaustive paper on the Etiology, etc., of this disease, reports that, according to Lyden and E. Sandier, micrococci seem to be the cause of this disease; but proof is wanting that this germ bears a causative relation to it.

Typhoid and Typhus Fever.—Amongst the various forms of typhoid fever which occur in children, it is scarcely necessary to insist upon the importance of diagnosing that transient variety which so frequently escapes observation. The premonitory symptoms are so vague, and the headache, restlessness at night, constipation and fever are so ill-defined and so slight that it is no easy matter to discover them. When the affection is once declared, however, it remains for some time—the chief symptom being that the child does not sleep, while the tongue is somewhat red, and the abdomen is slightly swollen. The spots are often difficult to see on account of the local applications which have been employed, but at a later stage the fever becomes well defined, with morning remissions until the fifteenth day, when the patient begins to convalesce. Ashby says typhoid fever more often aborts in children than in adults; that is, the disease runs a course of two weeks instead of three or four. The onset in the majority of cases is very gradual. Barthez and Rilliet, Hillier, Gerhardt, and others, place the death-rate of children from two to twelve years at ten per cent. Little medicine is required, excepting for the purpose of lowering the temperature, unless complications arise.

Measles.—Dr. Meedigan records three cases of insanity which occurred either during the course of, or in convalescence from measles. The youngest of those affected was aged fifteen, and the oldest aged twenty-six.

Dr. Pelerean calls attention to the influence of malaria

during an epidemic of roseola and measles. In many cases of roseola, which appeared first, the fever would assume a remittent type, either preceding the rash for from two to eight days, or the rash would precede the fever. Then, again, both fever and rash would declare themselves simultaneously. The severe symptoms noticed were headache, heat of skin, furred tongue, and vomiting. With the exception of quinia, in most cases the treatment was upon a merely expectant plan. Professor Demme, in a report on an epidemic of measles and its peculiarities, mentions two cases—one a girl suffering from chorea, and the other a boy, nine years old, suffering from prurigo—both of whom were freed of their respective diseases upon measles appearing; also that of a child, three years old, who had measles twice in ten weeks.

Dr. Keating, in a report of a recent epidemic of measles, calls especial attention to the following points, viz.: the microscopic examination of the blood and the constant association of micrococci with the general manifestation of malignancy (a condition already well known), and the gradual but positive amelioration of all bad symptoms by treatment, which was directed to the micrococci as the *fons et origo* of the trouble.

Variola and Vaccinia.—Dr. Roger McNeil says that statistics show that under ten years the initial rash is extremely rare, and that comparatively few vaccinated children under that age are affected with small-pox. But Dr. Stewart refers to a case reported by Dr. Richard S. Stewart, in which a child was born with pustules over its body, and died on the fourth or fifth day of small-pox, the mother having been attacked two weeks before parturition with this disease. Dr. I. E. Atkinson saw a woman, under the care of another physician, who, immediately preceding her confinement, was living in a room with a case of confluent small-pox. She was successfully vaccinated, and six days and nineteen hours after gave birth to an apparently healthy child. Three days after her labor her child was attacked with the disease, but of the discrete variety, and recovered without secondary fever or subsequent pitting.

Dr. Page, on treatment, says: "I have been so much pleased with the apparently abortive action of *actea racemosa* on variola in the case of a negro man who had 'just moved to Baltimore,' and on four of his children, all of whom had the disease coming out in rich profusion—that I made a note of the fact. Under the use of this drug the cases progressed to the papular stage, and in the case of the father pustulation

took place only on the face; but in the cases of the children the secondary fever and pustulation did not take place. The tincture of *actea racemosa* was administered with simple elixir. I have had no opportunity to try the medicine except in that one family." Rosenthal, acting on an article by Boyer, has employed salicylic acid in many cases with good results. He confirms the statement that salicylic acid in small-pox reduces the temperature, is sedative, and modifies the eruption.

Mumps.—MM. Cabiton and Charrin, at a recent meeting of the Biological Society of Paris, gave an account of the investigations on the presence of minute organisms in the blood of persons suffering from mumps. These are multipliable by cultivation in Liebig's broth, and are found to consist of minute *batonnets*, but chiefly of micrococci, all in a state of motion. These minute organisms corroborate the clinical observations which tend to place mumps among the infectious diseases. The absolute proof that this disease is due to these minute bodies by reproducing it by inoculation of the cultivated forms has not been attained by the experiments made to that end. Attention is called to the fact of the great frequency of meningitis as a metastasis and to the combination of this with orchitis. This combination, the writer believes, has not been recorded.

Infantile Diarrhœa.—Ballard says: "The disease cannot be considered a simple dyspepsia, but rather an affection of the system at large, which can, in less than twenty hours, produce lesions of considerable greatness." The influence of elevated temperature is undeniably efficient in producing this disease, and that influence remains even after the months of Autumn. In general terms, in great cities the maximum of heat in July will have a direct bearing upon the maximum of mortality from infantile diarrhœa. The fetid exhalations of sewers have been accused as the cause of this trouble. Admitting that there may be room for such a charge, it is observed that Nottingham, which possesses no sewers, has a high death-rate from infantile diarrhœa.

Erysipelas.—Dr. Lawrence draws attention to the frequency of infantile erysipelas. It may originate from puerperal fever or some epidemic influences prevailing at birth. It may occur as an idiopathic expression of a blood infection. More frequently, however, it has a traumatic origin, the starting point being the umbilicus; but any abraded cutaneous surface renders the disease possible, as eczema, intertrigo, impetigo, cicatrizing vaccine pustules, etc. W. A. Macleod substantiates the infectious nature of erysipelas.

Whooping-Cough.—Prof. Rossbach says, in regard to the essential nature of pertussis, that bronchial catarrh must not be regarded as a mere complication, but as immediately connected with the very existence of whooping-cough. The disease has its seat especially in the larger bronchi. Attacks of coughing are not alone produced by the mucus but also by the irritation of the violent draughts of air accompanying forced respiration. One of the essential etiological conditions is the existence of a reflex neurosis, and he thinks it probable that the coughing centre in the medulla oblongata is in a state of abnormal excitability owing to the presence of some specific virus. The results of treatment support these views. M. Gueneau de Mussy has constantly found enlargement of the mediastinal glands and compression of the recurrent laryngeal nerves in children that have died of whooping-cough. He considers whooping-cough to be an eruptive fever in which the eruption is internal.

Prof. O. Heubner has tested the comparative action of five of the most common remedies in this disease, viz.: bromide of potassium, quinine, hydrate of chloral, salicylic acid and belladonna. In none of the twenty-three cases in which the bromide was given was the duration of the disease lessened. Chloral was given in divided doses in two, and an enema in eight cases. In two the duration of the disease was lessened, and the intensity and length of the paroxysms in six cases. Salicylic acid was given by inhalation in sixteen, and as salicylate of soda internally in one case. In two, the duration of the disease, and in ten the length and severity of the paroxysms were lessened. Belladonna was given in eight cases. In three, the duration of the disease, and in one case the paroxysms were lessened. Thus salicylic acid and chloral tend to relieve the paroxysm; belladonna and quinine to shorten the disease. Dr John Dewar calls attention to ergot as being the safest and best remedy. It seldom fails to cure whooping-cough in from one to three weeks, the cases longer in getting better being those complicated with bronchitis or with troublesome bronchial catarrh. The dose used was four to fifteen minims of the fluid extract every three or four hours to a child of three months and upward. It must be borne in mind that there often arise stages of the disease in which other remedies must be used at the same time.

Dr. T. W. Brophy's report on Oral and Dental Surgery was referred to the Publishing Committee.

The Treasurer reported a balance of \$2,212 in the treasury.

Dr. Wm. Brodie moved that the payment of \$5 annually be made essential to permanent membership.

Dr. Lasure moved that the Association protest against any of its members endorsing, by signing certificates, any mineral waters or pharmaceutical preparations. Carried.

After some other routine work done by a small assemblage, the session adjourned *sine die*.

PROCEEDINGS OF SECTIONS.

PRACTICE OF MEDICINE.—*First Day*.—Dr. John V. Shoemaker, of Philadelphia, Chairman.

Simulation of Pathognomonic Signs and Symptoms.—Dr. Edward C. Janeway, of New York, referred to the many mistakes which he had seen resulting from placing too much reliance on so-called pathognomonic signs. Not many years since, choked disk, with headache, was considered pathognomonic of cerebral tumor. This sign is limited to an indication of increased intra-cranial pressure. Tremor is often relied on as indicating a multiple sclerosis. First, exclude metallic poisoning and effects of alcohol before admitting that tremor is a sign of multiple sclerosis. He then referred to indications from coma. Some hold that changes in temperature indicate whether coma is due to uræmia or to hæmorrhage, but some claim an elevated temperature and others a normal temperature, for the former. When the temperature is lower at the onset, and afterward becomes elevated, it has, in the author's experience, been a very positive sign of hæmorrhage into the brain. Some would rely on presence of albumen and casts, but these are often present with hæmorrhage. As to pulmonary signs, he had seen marked vocal fremitus in pleural effusion. He had also noted bronchial breathing in pleural effusion which could not be distinguished from the bronchial breathing of pneumonia. He also called attention to a condition of normal pectoriloquy. Double arterial murmur, supposed to be diagnostic between aneurism and a tumor pressing on the artery, he had found in several cases of tumors pressing on the aorta. He referred to the dyspnœa of Bright's disease, which is liable, from the cyanosis and great difficulty of breathing, to be referred to cardiac disease. He had found albumen in the urine in cases in which no other indication of renal disease was present. He reported cases in which albumen was sometimes present and sometimes absent. Hyaline casts may probably be occasionally present without indicating disease of the kidney.

Dr. Frank Donaldson, of Baltimore, thought there were points of distinction between the bronchial breathing of pleurisy and that of consolidation. The bronchial breathing of pleurisy is more pronounced in inspiration than in expiration. There may be serious disease of the heart without murmur. This is notably the case in large insufficiency of the mitral valve.

Dr. Lynch, of Baltimore, described a case of pleurisy in which bronchophony was very marked, and in which he attributed the sign to the fact that the lung was bound down by adhesions to the diaphragm.

Clinical Study of Heart Sounds.—Dr. Austin Flint, Sr., referred to a paper on this subject, read in 1858 before the Association in Washington. This paper he designed to be supplementary to that one. The views he then expressed, as to the value of the study of heart *sounds* as opposed to *murmurs* (or adventitious sounds added on to or replacing the normal sounds), he still holds. Cardiac murmurs are very important, and they are being carefully studied, but the sounds are too much neglected. The ordinary division of cardiac sounds into two kinds—the first, or systolic; the second, or diastolic, are very incomplete. The proper classification would be to say there are five sounds—two of which are diastolic and three systolic. The diastolic are (1) the aortic and (2) the pulmonary, heard in the right and left second intercostal spaces respectively. The systolic are (1) the mitral, (2) the tricuspid, and (3) the sound caused by the propulsion of the heart against the chest walls—the impulsion sound. This last is heard best at the apex, and determines the length and intensity of the first sound of the heart, and gives the booming character that is heard with this sound. The impulsion sound is heard over a limited area. The best place to hear the mitral sound proper is in the fourth intercostal space, far enough to the left to eliminate the sound caused by the impulsion. Here the sound is of a purely valvular character. The tricuspid sound is heard at the base of the xiphoid cartilage. Its maximum also is found where the effect of the impulsion of the heart can be eliminated.

Changes in the Aortic Sound.—Incompetency of these valves gives rise to a diastolic murmur. But this murmur furnishes evidence of nothing more than the simple fact that there is an incompetency. Of the extent of the incompetency, it furnishes no index whatever. This information must be obtained by the strength or weakness of the aortic sound which is heard along with the murmur, as compared with that of

the semilunar valves on the right side, provided these be under normal conditions, or, better still, by noting the character of the impulsive sound of the left ventricle. If this be much interfered with, it is a sign of marked overfilling of the left ventricle, and of a considerable degree of insufficiency. The *aortic sound* may be diminished also by the lessened quantity of blood sent into it by the left ventricle, as in cases of mitral disease. It may be increased in one of two ways: by the increased force of the systole of the heart, or by increased pressure in the systemic arteries, as in contracted kidney. This cause, so much dwelt upon by authorities as to be taken as almost pathognomonic of contracted kidney, Prof. Flint looked upon as very doubtful. In some experiments undertaken by Dr. C. F. Roy, in which he abruptly cut off a considerable part of the general circulation by tying a main artery leading to the part, there was hardly the slightest effect produced on the aortic sound. As a matter of clinical experience, this state of the aortic sound did exist without the disease in the kidney, and *vice versa*.

Changes in the Pulmonary Sound.—This may be increased or diminished. Skoda pointed out *increase* in the sound when the right ventricle is hypertrophied. The sound is also intensified by anything causing obstruction in the circulation of the blood through the lungs. Increased blood pressure is met with in the pulmonary circulation in various diseases of the lungs, such as pneumonia, capillary bronchitis, emphysema, pleurisy, etc., and the amount of increase in the intensity of the pulmonary sound is a gauge of the amount of obstruction in the lung. When the heart is beating more rapidly than usual, as after exertion or in mental excitement, the pulmonary sound is more increased than the aortic from this same reason. As to the significance of *diminished* intensity of the pulmonary sound, Dr. Flint would not say much. It would be present in regurgitation, which, however, is an extremely rare affection. The absence of the sound in aortic trouble is also of little practical moment.

Changes in the Mitral Sound.—Heard best in the fourth intercostal space, is short and valvular. A systolic murmur here denotes incompetency of the mitral valve, but gives no information as to the degree. The weakness of the sound heard with the murmur will give a clue. The sound is also weak when there is fatty degeneration or dilatation. In overfilling of the left ventricle, the excursive movements of the mitral valve are interfered with, and are lessened. The tension of the valves during the systole will, under these cir-

cumstances, be not sufficient to occasion much sound, for the intensity is in proportion to the excursive movement of the valves. In anaemia, the sound is intensified. In cases in which there is a presystolic murmur, and the sound is more intense, it shows that the curtains of the valves adhere to one another, leaving a button-hole opening. In these cases, the action of the valves is strong, and there may be no systolic murmur.

Impulsion sound generally predominates very much in healthy persons. It may be increased, decreased, or lost. As it is an ex-cardial sound, and is not transmitted, it is heard over only a limited area. It has a specially booming character in hypertrophy. It is diminished in fatty degeneration, and in softening of the tissues of the heart, in fevers—when it serves an important purpose in indicating the need of stimulants, etc. In pericarditis, it is lost during the stage of effusion. In these cases, the aortic sound may be louder at the apex than the mitral.

Tricuspid Sound.—Weakness of this sound is of slight importance. A thrombus in the right ventricle has been known to extinguish the sound altogether. In hypertrophy of the right ventricle it is intensified, and this is a better sign of this condition than the increased intensity of the pulmonary sounds, since that depends so much on the variations in the blood-pressure in the pulmonary artery. Disease of this valve is rare, except as a congenital trouble.

Dr. F. C. Shattuck noticed that Dr. Flint ignored the muscular element in the production of the first sound, which is regarded as so important by many. There is a difficulty in the theory that contracting muscles make appreciable sound. In hypertrophy following aortic disease, the first sound is sometimes wanting.

Dr. James C. Wilson, of Philadelphia, said that in Germany emphasis had been laid upon the study of heart *sounds* as well as of murmurs, and referred to the work of Felix v. Niemeyer. There is some doubt as to the part played in the production of the first sound by the contraction of the muscles.

Dr. Garland, of Massachusetts, spoke of the importance of eliminating the effect on cardiac sounds of the respiratory movements. In cases of any doubt, always examine the heart during forced inspiration and forced expiration.

Dr. Donaldson, of Baltimore, thought it doubtful whether impulsion could be considered a *sound*. It adds to the intensity, but is hardly a sound *per se*. He denied the muscular

element in the production of any sound capable of being heard by ordinary methods. The presystolic murmur he was rather inclined to consider, with Leaming, to be produced at the commencement of the systolic sound, and not by the contraction of the auricle, which was so slight and weak.

Dr. Janeway, of New York, said that in cases in which there was a presystolic murmur, the auricle was hypertrophied and its contractions were therefore stronger—there was also felt a presystolic thrill.

Dr. J. S. Lynch did not agree with Dr. Flint in regard to the absence of increased aortic sound in cases of contracted kidney. He noticed that Dr. Flint assumed increased tension in the pulmonary artery to be the cause of increased intensity of the pulmonary sound. Why, therefore, did he deny a similar cause in the production of an increased intensity of the aortic sound? He also noticed that Dr. Flint had taken no account of the systolic vibrations of the aorta in the production of the first sound of the heart. It was this, Dr. Lynch thought, that gave the first sound its booming character.

Dr. Flint said that he would not reply to the remarks that had been made as to the cause of cardiac murmurs, nor even to the cause of cardiac sounds, as time was limited and he had confined himself to clinical questions exclusively. In regard to Dr. Lynch's objection to the inconsistency of denying increased pressure in the systemic arteries to be a cause of increase in the intensity of the aortic sound, he had no explanation; he based his conclusions on clinical facts.

Dermatitis Herpetiformis.—Dr. Louis A. Duhring, of Philadelphia, under this title, described a rare disease, of which he had seen fifteen cases. The affection shows itself in a variety of ways, by patches of an urticarial or erythematous character, by herpetic vesicles, by blebs, by pustules, and by papules. All these lesions tend to take a herpetic type. These different conditions may be present at one time, or they may succeed each other. The disease is remarkable for the multififormity of its lesions. The author then went on to describe the different varieties of dermatitis herpetiformis—papular, vesicular, bullous, pustular and multiform. These different eruptions are accompanied with violent itching and burning. It was considered to be a neurotic affection. The treatment is considered very unsatisfactory, and the disease may continue for years.

The paper concluded with the following *résumé*:

1. The existence is shown of a distinct, clearly defined, rare, serious, herpetic disease of the skin, manifesting itself usually in successive outbreaks, characterized by more or less systematic disturbance, a variety of primary and secondary lesions, and severe itching and burning.

2. The disease is capable of appearing in many forms, having a tendency to run into one another irregularly, the principal varieties being the erythematous, vesicular, bullous, and pustular, which may occur singly or together in various combinations.

3. The disease is protean in character and is remarkable for its multiformity.

4. The pustular variety is the same manifestation as that described by Hebra under the name "impetigo herpetiformis."

5. The term "dermatitis herpetiformis" is sufficiently comprehensive and appropriate to include all varieties of the disease.

6. It may occur in both sexes, and in women independent of pregnancy.

7. It usually pursues a chronic, variable course, lasting years, and is very rebellious to treatment.

Etiology of Pericarditis.—Dr. James Whittaker, of Cincinnati, said this disease is more often overlooked than suspected, and it is often latent, owing to the fact that frequently the local symptoms are slight, and where there is no history of rheumatism it is apt to be overlooked. Rheumatism is the most frequent single cause, but it does not cause the majority of all the cases. Of the frequency of pericarditis, the author quoted statistics showing that about four per cent. of autopsies give evidence of the existence of pericarditis, which is really higher than the proportion of endocarditis; clinically, endocarditis would seem to be more common. Pericarditis should not be classified as primary and secondary, but as mechanical and infectious—the first arises from injuries and from extension of inflammation from contiguous parts, etc.; the second, which is the true pericarditis, occurs in diseases dependent upon the existence of a micro-organism. Rheumatism heads the list, then pyæmia, septicæmia, typhus and typhoid fevers, scarlatina, etc., malignant dysentery, cholera—in short, all diseases that have a mycotic origin. Three cases have been reported as occurring after vaccination. Infantile pericarditis has generally been referred to puerperal disease in the mother having extended to the child. It proves fatal in the first sixteen days of life. En-

docarditis is frequently associated with pericarditis. The treatment medicinally should be anti-mycotics, cold, and rest.

Production of Poisons by Micro-Organisms.—Dr. C. V. Black, of Illinois, after an extended review of the subject, summed up in the following conclusions:

First. All cognizable forms of life are dependent upon the products of molecular change in matter for their continued existence.

Second. Every cognizable form of life, capable of independent existence, must have the power of digestion, for the preparation of food-material for the nutrition of its material structure.

Third. Each living cell must appropriate to its nutrition food-material prepared by a digestive body of its own, or by the appropriation of material prepared for it vicariously by some allied living cell.

Fourth. Every living cell must support its life and material structure by a continued inhibition and remolecularization of matter within itself, except during special provisions of rest, as in the seed, egg, etc.

Fifth. Every living cell must, as a result of the remolecularization of matter within itself, throw off waste products of two classes, a respiratory waste, rich in oxygen, and an urinary waste, poor in oxygen. All waste products are poisonous to the lives from which they emanate.

Sixth. The natural organic poisons are uniformly waste products of the organisms in which they are formed.

Seventh. Pathogenic micro-organisms by their remolecularization of matter, form poisons analagous to the vegetable alkaloids which are the active agents in the production of disease.

Eighth. While I should not class the digestive ferments, as diastase, etc., as organic poisons, they may act as irritants when applied to another form of life than that which produced them.

Ninth. Normal tissues resist the invasion of the micro-organisms by throwing out matter calculated to destroy them or dissipate or nullify their action, aroused thereto by the presence of an irritant agent given out by the micro-organism.

The New Chlorate.—Dr. Traill Green, of Easton, Pa., praised the chlorate of sodium, thinking it superior to the potassium chlorate in every case in which the latter is useful, as being more soluble and far less irritating to the stomach. It can be given in larger doses, and therefore is more efficacious. As a local application in poisoning from the

mercury vine, in the proportion of 4 to 12 grammes to 500 cubic centimetres of water, it is most satisfactory; also as a local wash in scarlatina. In conjunctivitis, and in irritations of mucous membranes ending in the skin (piles, etc.), it is most soothing. He thought the sodium salts in every way preferable to the potassium salts, and illustrated the difference in the irritating qualities of sodium and potassium salts, in the use of bicarbonate of sodium in burns, which answers well, while no one would think of using bicarbonate of potassium for the same purpose. In conclusion, he said that if any physician would try the effect of substituting sodium chlorate for potassium chlorate in his practice for one month, he felt sure that he would discard the potassium for the sodium. He had seen a case of angina yield to sodium chlorate that had resisted the potassium salt.

Dr. J. J. Caldwell, of Baltimore, has used chlorate of sodium with satisfaction.

SECOND DAY.—A Periodically Painful Affection, Believed to be Located in the Liver, its Capsule, or both, or Possibly a True Irritation of the Capsule of Glisson, was the title of the paper read by Dr. R. Harvey Reed, of Mansfield, O. He referred to a number of cases presenting a peculiar train of symptoms, which he considered to be due to a rheumatoid irritation of a part or all of the connective tissue which forms the inner tunic of the liver and envelopes the portal vein, hepatic artery and duct, together with the lobules of the liver. The disease is characterized by a burning, boring, throbbing, darting, or lancinating pain. This, as a rule, comes on at night. No evidence of inflammation has been observed. The affection was supposed to be attributable to sedentary habits, and it had not been seen in intemperate or syphilitic persons. It comes on gradually with a little pain in the abdomen, but this increases in severity until the condition of the patient may appear alarming. The attacks are periodical, and may return once a month or oftener, sometimes recurring as often as every night. If they are not relieved by treatment they may continue for months or years. The diagnostic points, differentiating this affection from hepatic colic and other hepatic diseases, were not referred to. The prognosis is entirely favorable. Under a proper plan of treatment the disease usually disappears in a few weeks. The treatment should consist in the use of alkalies and bitter tonics, for instance, a teaspoonful of bicarbonate of sodium, with five grains of powdered *hydrastis canadensis*, in half a glassful

of water before meals, or sulphate of sodium with sulphate of hydrastia. Mercurials do more harm than good, and anodynes are to be administered only when the pain is so severe that their use cannot be dispensed with.

The speaker then gave a detailed report of three cases, which had been selected from a series of twenty-five cases occurring under his observation.

Epilepsy.—Dr. William Pepper, of Philadelphia, excluded cases due to organic causes; but it is often difficult to decide whether or not such causes exist. The author then went on to speak of the analogies between hysteria and epilepsy. Both these affections represent conditions of malnutrition with morbid irritability of nerve-tissue. In hysteria, the ganglionic gray matter is especially vulnerable, while epilepsy is probably dependent upon an unstable condition of one or more areas of the gray matter within the brain. The most prominent factors in bringing about this condition are, heredity, nervous exhaustion, shock or sudden powerful impressions, sunstroke, purely psychical shocks, disturbed nutrition of the brain from instability of the circulation, as in heart disease and anæmia, possibly minute emboli, and peripheral irritation especially of the gastro-intestinal canal. A consideration of the different cases usually classed under the head of epilepsy shows that these cases are not afflicted with a single, definite disease, and that they exhibit in common merely impaired nutrition and irritability of the gray matter. The effects of habit have a decided influence in keeping up attacks of epilepsy. The degree of instability varies in these cases. Some are only affected by a very powerful influence, while in others the slightest cause is sufficient to induce the seizures. Although provoking causes may not be found in all cases of epilepsy, yet if they are carefully sought for they will frequently be found. Among the most common provoking causes are indiscretions in diet and improper food. These may act by exciting local irritation, or possibly may induce a condition of toxæmia, from the entrance into the blood of imperfectly elaborated materials, or from the failure of the emunctories to remove certain injurious products. A close analogy was traced between many of these cases of epilepsy and certain cases of vertigo in lithæmic patients. Where the trouble with the nervous system has resulted from insolation, exposure to the rays of the sun or intense light may induce the attacks. When there is associated cardiac lesion with the epilepsy, exertion or excitement of the circulation may bring on the seizures.

Dr. Pepper took exception to the statement frequently made that epileptics are in full health. He usually found derangement of some important function.

The principles of treatment follow from the consideration of the points referred to. No one plan of treatment is applicable to all cases. The primary and provoking causes should be removed when possible. Anæmia, neurasthenia, and morbid susceptibility are to be relieved. Intestinal irritation is to be cured. In such cases nitrate of silver is often of great benefit. Over-exertion, especially in cardiac cases is to be avoided. Counter-irritation with the actual cautery is of decided value, especially in those cases in which intracranial irritation is suspected. Where circumscribed lesion of the cranial bones is supposed to exist, trephining may often be used with advantage. Irritation of the genital organs is to be relieved. The attacks should be arrested, for if they are allowed to continue they increase the liability to subsequent attacks. Particular attention is to be paid to the diet, which is to be suited to the needs of each particular case. Among the drugs mentioned as of service are the bromides, belladonna, assafoetida, chloral by enema, iron, and tonics. The bromides are of decided value, but in their use caution is to be exercised, for they frequently fail, are often abused, and may even be injurious.

Dr. Austin Flint, Sr., of New York, maintained that the manifestations of epilepsy are dependent upon a toxical agent of some kind produced somewhere within the body. He presented the following points in favor of this view:

1. The absence of any generally received pathological doctrine.
2. There is close analogy between the phenomena of epilepsy and other diseases known to be produced by toxical causes.
3. Certain facts pertaining to the clinical history are more readily accounted for on the view of a toxical agent.
4. Facts pertaining to the therapeutics of epilepsy favor the doctrine of toxical causation.

Dr. Eugene Grissom, of North Carolina, referred, in speaking of the treatment of functional epilepsy, to the importance of careful attention to diet, regulation of exercise, and avoidance of fatigue. The remedies to be used depend in part upon the provoking cause.

Dr. James F. Hibbard, of Indiana, stated that he thought that if all cases in which an exciting cause was discovered were put to one side, epilepsy was never cured. Certain

drugs, notably the bromides, are useful in ameliorating the condition. A toxical causation has been suggested, but even if this be so there must be some underlying convulsive diathesis.

Dr. J. J. Caldwell, of Baltimore, thought that Dr. Flint could not consider those cases which lasted for years as due to a toxical cause, for toxical causes must have an ending some time. He referred to cases in which epileptic seizures had disappeared upon the occurrence of attacks of gout.

Dr. James Tyson, of Philadelphia, referred to the value of the use of a seton through the nape of the neck in certain cases. In one case fifteen years had elapsed since the last seizure.

Dr. Bartlett, of New York, had also seen good results from the seton, and reported cases which had remained well for four years. He deprecated the injudicious use of the bromides.

Dr. Pattee, of Massachusetts, spoke in reference to the use of the bromides of different bases according to the condition associated with epilepsy. In plethoric cases he employs bromide of potassium; in anæmic cases, bromide of sodium or iron, and in cases associated with gout, the bromide of lithium. In other cases associated with gastric or intestinal irritation, he has used wine of ipecac in five-drop doses every three hours with advantage. He has cured cases by means of purely psychical influences, as for instance, the use of the spirometer.

Dr. Pepper, in concluding the subject, stated that he was glad to be supported by the distinguished gentleman from New York as regarded the toxical character of certain cases, but did not think that this would explain all the cases of epilepsy.

Diagnosis of Tumors of the Anterior Mediastinum.—Dr. Jas. C. Wilson, of Philadelphia, described this region as a physiological and anatomical “no-man’s land,” of very slight importance in health, but pathologically of great importance, and often neglected. The distinction which should be made between growths in the posterior and anterior mediastinum, for scientific diagnosis and treatment, is often overlooked. Disease is found in this locality in two forms: First, purulent inflammation of the tissues; second, new growths. Simple acute inflammation is unknown. There is one case on record of inflammation resulting in a solid exudation. Abscess, on the other hand, is not uncommon. The growths are divided into cysts (generally dermoid, and very rare),

lipomata, fibromata, and osteomata, exostoses, tubercular disease in the glands, gummata and lymphoma, carcinoma and sarcoma. Tubercular disease in the glands of the mediastinum is less frequent than in the bronchial glands, and cannot be diagnosticated. The first mentioned of the above varieties are very rare; the last three are the most common. Carcinoma is always secondary in this locality, and primary sarcoma is rare. Lymphoma is the commonest form. It occurs in the glands, and rapidly involves the surrounding structures. It must attain a sufficient volume to press on the neighboring organs to be discovered. It is to be diagnosticated from aortic aneurism and tumors in the posterior mediastinum. Physical signs merely reveal the presence of a tumor, but do not show its special character. The symptoms are: pain of a superficial character, dyspnœa, scanty expectoration, and dysphagia, with paroxysmal intensification of the symptoms. There is no fever; nutrition is good, except when the œsophagus is pressed upon. Among the signs are: Repletion of veins of the face, prominence of eyes, livid lips, aborescent condition of varicose veins upon the chest, enlargement of the chest above the fourth rib, enlargement of the thymus gland, when present, and of glands in the axillæ, asymmetrical expansion of the chest on pressure, displacement of the heart, increased dullness over the upper part of the sternum corresponding to the size of the tumor, and dullness in the interscapular region, if the growth be large. The auscultation signs are somewhat modified. Cardiac sounds are feeble, though sometimes intensified over extra precordial region over the tumor. There is no stridulous breathing, but enfeeblement of the respiratory murmur, if a bronchus of one side be obstructed. *The enlargement of the veins* distinguishes it from a tumor of posterior mediastinum. Aneurism is excluded by the history, by the absence of thrill, by the early age at which the disease occurs, and by the stitch-like, superficial character of the pain. Pericardial effusion is excluded by the irregular outline of dullness, by its higher level, absence of fever, and by the history and progress of the case. Excision of the sternum has been resorted to with some success. The existence of malignant disease in other parts of the body is a great help in the diagnosis. Abscess may occur from blows, caries, or operations in the vicinity. There will be constitutional symptoms: Chill, fever, deep-seated pain, and pointing of the abscess. The paper concluded with some remarks on the rarer forms of disease in this locality.

Pathology of Myocarditis.—Dr. William H. Welsh, of New York, referred to the want of attention which had been paid to affections of the muscular wall of the heart, and of those diseases of the cardiac muscle which had been considered, the most important had been the least studied. This is myocarditis. He then described the different forms of this condition, and gave microscopical appearances. He directed attention to the importance of partial occlusion of the coronary arteries in the causation of this condition of the heart-muscle, which is not strictly the result of inflammation, but of atrophy and degeneration, due to insufficient blood-supply.

Dr. Austin Flint, Sr., of New York, had met with cases in which the most careful examination revealed no physical signs of disease. In one case he had made the examination a number of times with negative results. The patient died suddenly, and at the autopsy obstruction of the coronary arteries was the only condition found to explain the sudden death.

Dr. McSherry, of Baltimore, reported a case supporting the views of Dr. Welsh.

Dr. Donaldson referred to the great advantage which would follow some method of diagnosing this condition, and asked if some information could not be obtained by means of the sphygmograph or an examination of the other arteries.

Dr. Janeway thought that the most that could be done in the way of diagnosis was to discover weak heart. If there was endo-arteritis in other arteries, it would favor the idea that the same condition was present in the coronary arteries.

Irregular Apoplectiform Attacks from Other Causes than Hemorrhage or Embolism.—Dr. Gaspar Griswold, of New York, stated that he should apply the term apoplexy to denote the sudden onset of a set of symptoms of which unconsciousness, hemiplegia, and convulsions were the most marked. In using this term apoplexy he did not refer to any special cause for these symptoms. Apoplexy may be due, as all know, to cerebral hemorrhage, embolism, and thrombosis. In such cases pathology has enabled us to differentiate with considerable certainty between these different affections, but in the case of functional interference with the circulation of the brain, post-mortem studies cannot afford much assistance. It is therefore necessary, in considering affections due to this cause, to depend on experiment and clinical observations. Heart-failure, or vaso motor nerve disturbance, will cause anæmia of the brain, and this may show itself by coma and

convulsions. In such cases the symptoms often resemble those due to hemorrhage, thrombosis, or embolism, and this is not at all surprising, since in these latter cases the symptoms are to a large extent due to disturbance of the cerebral circulation. It is often difficult, from the symptoms alone, to differentiate between apoplexy due to an organic cause, and apoplexy due to functional derangement of the circulation. There is, however, a great difference in the persistence of the symptoms. In the early stages a mistake is almost unavoidable, and often the recovery of the patient is the only thing which enables a correct diagnosis to be made.

Dr. Janeway reported two cases in which the apoplectic attacks resulted from excessive smoking. In both recovery followed the giving up of this habit.

Dr. Austin Flint, Jr., of New York, thought that we were coming to attach more importance to alterations of the circulation of the brain, and he reported some physiological experiments on animals, which showed that when the blood-supply of the brain was diminished convulsions frequently ensued.

THIRD DAY.—Dietetic Treatment of Diabetes Mellitus.—Dr. Austin Flint, Jr., of New York, first referred to the fact that in a small proportion of cases sugar in the urine is found in apparently healthy individuals. Sugar may be present in urine of normal or low specific gravity and quantity. He believed that the liver was a sugar-producing organ. This sugar was washed out by the blood as rapidly as it formed. He believed that if the case was taken in time, and the patient would submit to certain measures, it is possible to effect a cure, or at least remove the symptom, with the exception, perhaps, of the occasional appearance of sugar in the urine. He divided treatment into dietetic, general and medical. Dietetic consists in avoidance of all substances containing sugar or starch; after sugar has been absent for two months the patient may gradually return to the use of ordinary diet. During this time the urine should be examined every five or six days, alcohol must be avoided, and regular muscular exercise should be insisted upon. The doctor has found the solution of arsenite of bromine of service, but the most reliance must be placed on diet. If these points are attended to, the prognosis in recent cases in adults is favorable. The most unfavorable cases are those in which disease appears before puberty.

Phthisis, its Successful Treatment, was read by title by J. P.

Miller of Buckhannon, W. Va. After briefly referring to the bacillus tuberculosis and the theory of Koch, and stating his belief that this theory would not aid in preventing or curing phthisis, the author went on to describe the climate and position of the region where his practice lay. Buckhannon is situated 1,600 feet above tide water, and the climate is remarkable for its humidity and the sudden and great changes of temperature which occur. These are especially marked during the winter and spring. A fall or rise of from 35° to 50° F. in twenty-four hours is not uncommon, and a rise of 64° in nine hours has been noted. Owing to these climatic conditions diseases of the respiratory organs are of frequent occurrence, and on account of the success which he had obtained in the treatment of phthisis the speaker placed himself in opposition to the common belief that phthisis was an incurable affection.

The treatment was next spoken of. In the treatment of high temperature of phthisis florida, the salicylate of sodium, in doses of grs. xvj. to grs. xxiv., had been found to be the most serviceable antipyretic. When diarrhœa was present, from one-fourth to one-half a grain of morphia was added to each dose of the salicylate. The antipyretic should be given during the remission of the fever, and shortly before the exacerbation.

To relieve nausea and vomiting the following prescriptions are used according to circumstances.

Ry. Acidi carbolicæ..... 3j.
Tinet. iodini..... 5 ij.

M. Sig.—Three drops in water, before food, three times a day; or,

Ry. Strychniæ..... gr. j.
Acid. nitromuriat. dil. 5 ss.

M. Sig.—From four to eight drops, given as in the previous case.

Fowler's solution in doses of not more than three drops will often have the desired effect. If there is diarrhœa, from three to six drops of deodorized laudanum should be added to each dose. Mustard plasters over the stomach may also be used. Digestion may be assisted by the use of dilute hydrochloric acid before meals, followed with pepsin after meals.

The speaker then referred to the good effects which he had obtained from the use of yerba santa in causing the softening, absorption, and extrusion of caseous or tuberculous matters. For these purposes it has no equal in the Materia

Medica. In the early stages of phthisis where there is gastro-hepatic and duodenal catarrh, it answers every purpose. In cases of pyrexial phthisis, where various antipyretics have been tried without effect, the continuous use of yerba santa has reduced the temperature from 105° to 99° in the course of a week. Yerba santa has the effect of inducing sweating, and in this way serves to reduce fever. In cases where the temperature is normal or below normal, picrotoxin, or strychnia and atropia, may be used if the night-sweats are copious.

Counter-irritation is of the greatest importance, and even where the patient is weak and anæmic good results will often follow the use of a blister. In incipient cases iodide of iron and cod-liver oil are of service in causing the disappearance of the exudation. This may be administered with Trommer's extract of malt.

When there is a catarrhal process extending to the alveoli from the bronchi, the iodide and carbonate of ammonium have a beneficial influence. They may be given as follows:

R. Ammon. iodidi..... 3 j.
 Ammon. carb..... 3 jss.
 Syrup. tolu.,
 Aquæ, aa 3 ij.

Sig.—A teaspoonful every four hours.

The doctor then referred to the fact that in addition to administering drugs it was important to protect the patient from outside influences which would tend to depress the mind, such as the anxiety of friends and the superstitions of neighbors.

Tuberculosis.—Dr. Henry F. Formad, of Philadelphia, first considered the question of the contagiousness of tuberculosis, and after presenting an extended review of the evidence *pro* and *con* on this point, concluded that tuberculosis was not a contagious disorder, and those cases in which it appeared to be the case could be explained on other grounds. He admitted that Koch's observations were correct, but his conclusions were not warranted. It has been shown that the bacillus is not invariably present in tuberculosis matter, and further, that it is not usually present in the beginning of the disease, but is found chiefly in the disintegrating products of tubercle. The bacillus is often found in only very minute quantities. It is not proven that the disease produced in animals is identical with that which exists in man. Some of the products in these experiments may not be tubercular but simply be mistaken for tubercles. Tubercles may be produced by other things than the bacillus tuberculosis, and conditions present-

ing the anatomical and other characteristics of tuberculosis may be present without the bacillus being discovered. The parasitic etiology of tuberculosis was not proved and the adoption of this view was liable to do more harm than good.

Dr. Austin Flint, Sr., thought it pretty positively proven that the bacillus tuberculosis held a causative relation to tuberculosis, and it is opposed to all analogy to suppose that tuberculosis could be produced by any other cause. Other causes may, and undoubtedly do co-operate with it, but the presence of this specific agent is essential to the production of the disease.

Dr. W. H. Welch said that Koch had claimed that all the essential conditions had been complied with in his experiments. He thought that tuberculosis was caused by the bacillus, and in all probability by that alone. When the difficulty which attends the detection of the bacillus is considered, it is not to be wondered at that at times it might escape notice. Of late Koch has found it in all tubercular lesions examined. The essential question is, whether tuberculosis can be produced by nothing else than the bacillus. The weight of evidence is in favor of the view that phthisis can be produced by the inoculation of no other than tuberculosis matter.

Dr. George M. Sternberg, U. S. A., had performed some experiments, but they had not satisfied him in regard to this matter. The view that the bacillus might act as a local irritant was worthy of consideration. In the experiments of Formad the animals in whom tuberculosis had followed the inoculation with other substances than bacilli, might have the condition developed in consequence of improper surroundings. He was not satisfied that Koch's culture experiments on the surface of sterilized substances were to be relied upon.

Dr. R. P. Fitz, of Massachusetts, thought that pneumonia and other conditions found in the lung might be due to the bacillus.

Dr. Tyson thought that the evidence in favor of Koch's view was very strong, but before deciding in the matter it would be necessary to wait until it was decided whether the views of Koch as formed were the correct ones.

Dr. Janeway stated his belief in the contagiousness of phthisis, and cited cases supporting his opinion.

Dr. Chas. Dennison, of Canada, exhibited a chart showing the geographical distribution of phthisis and pneumonia in warm and moist climates, while in cold and dry atmospheres these diseases were more rare.

Dr. Belfield could not accept the view that phthisis was due to bacteria.

Dr. Shakespeare, of Philadelphia, thought that nothing but the tubercle bacillus could produce tuberculosis. Dr. Formad attributed the liability of certain animals to tuberculosis to certain peculiarities of the lymph-spaces, but he had stated that in such animals the perivascular lymph-spaces were not altered. It is well known that it is in these spaces that tubercle first makes its appearance.

Dr. G. C. Smythe, of Indiana, thought that tuberculosis might belong to the local infectious affections, such as syphilis and leprosy.

Dr. H. C. Earnst, of Massachusetts, agreed with the views expressed by Drs. Welch and Fitz, and added some remarks in regard to the different methods of staining the tubercle bacillus. In these investigations nothing less than an immersion lens and a substage illuminating apparatus was to be relied upon.

Dr. Wm. Pepper did not believe in the contagiousness of phthisis.

Dr. G. Traill Green did not accept the view that consumption was due to a parasite, and he referred to cases in which consumption had developed in perfectly healthy individuals in consequence of working in a grindstone manufactory.

Dr. Formad said that the animals on which he had experimented had been kept under the best hygienic surroundings.

Specific Treatment of Diphtheria and Croup.—Dr. George A. Linn, of Monongahela, Pa., considered that we had a specific for diphtheria in the corrosive chloride of mercury. It is necessary to give the remedy in large doses in the early stage of the disease. The dose for a child three years of age is from one-twentieth to one-twelfth of a grain; for an adult one-twelfth to one-eighth of a grain every three hours. In mild cases it should be continued for three days, and in malignant cases for two or three days longer. It is best given in solution, and a good vehicle for administering it is elixir of pepsin or elixir of pepsin and bismuth. If this treatment be instituted at the commencement of the disease no tonics or sustaining treatment will be required; but if the disease has lasted for some time, brandy and iron are to be also employed. Where the membrane invades the larynx, there may be danger of suffocation, but this is due more to spasm than to the presence of the membrane. For this condition the chloride of gold is a specific. It has no taste, produces no nausea, and acts like a charm. The dose for a child two

years of age is from one-fiftieth to one-thirtieth of a grain every hour until relieved. It should be given dissolved in distilled water, and should not be brought in contact with a metal spoon. For simple croup the author regards this as a specific. In diphtheritic croup the bichloride of mercury should be associated with it.

SURGICAL SECTION.—*First Day, May 6th.*—Dr. C. T. Parkes, of Chicago, chairman.

Treatment of Compound Fractures.—Dr. Fred. S. Dennis, of New York, said there are several salient points to be considered in advocating any special treatment.

First, the method should be a safe one, and proved to be such by the test of experience. Second, it should yield results unattended by any septic infection, by shortening, and by deformity. Third, it should be a simple one, unaccompanied by compound splints and cumbersome apparatus.

As essentials for the attainment of good results, the author gave these rules: Immediate fixation, absolute cleanliness, and arrangements for thorough drainage when necessary.

Immediately after the injury, the wound should be carefully washed with a solution of carbolic acid, or irrigated with a solution of the bichloride of mercury, and the plaster-of-Paris bandage immediately applied. The bone, if it protrudes and cannot be reduced, should be sawn off with the chain-saw. A fenestrum is cut through the bandage to permit free drainage. Primary union had occurred in a number of cases in his practice without suppuration, and without the use of a fenestrum in the bandage. When suppuration does occur, however, the keynote to success is to keep the parts free from septic irritation, which is accomplished by free drainage and frequent cleansing with antiseptic solutions. When the granulating surface is pale and unhealthy in appearance, a poultice sprinkled with red cinchona bark should be applied. When the parts are healthy, iodoform may be used. He then defined a compound fracture, stating that the entrance of air to the seat of fracture is an essential condition to its definition, and that, hence, the wound through the soft parts is produced by the injured parts within pushing out. His plan of treatment was unattended in any case with non-union and deformity, and his records, as regards shortening, were as satisfactory as any, and during the process of repair there was as little disturbance of health as was found in any plan of treatment. He reported 128 consecutive cases of compound fracture of various parts of

the body, which may be summarized thus: Compound fractures of skull, 22 with 6 deaths. Of the 16 recovering, 10 were trephined. Compound fractures of thigh, 3; leg, 48; arm, 10; forearm, 13; lower jaw, 8; hand and foot, 19; ribs and nasal bones, 4; miscellaneous cases, 30. Deducting from these cases those who died from shock or within forty-eight hours after injury, he had ninety-five cases without a death. This mortality was lower than that reported from treatment by the strictest antiseptic Listerian method.

Just at the close of the reading of this paper, the Chairman was handed a telegram containing the sad intelligence of the death of Dr. S. D. Gross. On motion, a committee was appointed to draft resolutions upon the death of the esteemed member, and the Section adjourned until Wednesday afternoon.

SECOND DAY.—May 7th.—Railroad Injuries of the Extremities with Observations on the Site of Amputation and Subsequent Treatment of the Stump.—Dr. T. R. Varick, of New Jersey, said that traumatism is not confined to the immediate part struck, but usually extends far beyond, and great care should be taken to thoroughly examine the parts for bruised subcutaneous tissue, at a considerable distance from the apparent seat of injury. Two causes for this were:

First. Muscles ruptured by their own contractile efforts, as the victim, immovably fixed at one point, struggles to free himself.

Second. The pulpification of the tissues, producing a scattering of the liquids contained therein.

He believed that the common cause of death in railroad injuries, when shock occurs, is due to the forcing back of the venous blood to the right side of the heart, producing paralysis of that organ. The after-dressing of the stump by almost hot water, the keeping open the flaps after amputation as long as any oozing is perceptible, free drainage by tubes, irrigation by means of a thymol solution, and an outer dressing of oakum, was the general form of practice adopted by the writer, and he felt that his statistics would bear criticism, or comparison with those of other surgeons. He reported twenty-one major amputations without a death, all but two being compound comminuted fractures produced by railroad injury.

Death of Professor Gross.—Prof. Lewis A. Sayre, of New York, read the report of the special committee appointed to draw up resolutions in relation to the death of Professor S. D. Gross, which was adopted.

Dr. J. W. S. Gouley, of New York, presented a specimen of pieces of a *calculus fractured spontaneously in the bladder* of a patient, and evacuated *per viam naturalem*, and explained what might be the cause of the so-called spontaneous fracture of stone in the bladder, namely, molecular action.

Dr. Lewis A. Sayre, of New York, thought that a calculus could not fracture spontaneously.

Dr. Ford Thompson, of Washington, who attended the patient from whom the calculus came, had some doubt of this being a case of spontaneous fracture.

Dr. J. C. Hutchison, of Brooklyn, also reported a case of what he believed to be undoubtedly a spontaneous fracture of a mulberry calculus.

Dr. Prewitt, of St. Louis, did not believe in the possibility of fractures of stones he had seen.

Dr. Pollock, of Pennsylvania, reported a case which might have been one of fracture.

Dr. Dawson, of Ohio, thought spontaneous fracture could not occur.

Amputation at the Hip-Joint.—Dr. C. A. Wheaton, of Minnesota, read a paper on this subject. He gave a history of the different important devices for preventing bleeding from the iliac during and after the amputation. He did not like digital pressure as sometimes employed; the abdominal tourniquet was too apt to make pressure on the important organs, nerves, etc., of the parts. Lever instruments were spoken of, and reference made to peritonitis being induced by the rectal lever. Lloyd's mode of using an India-rubber band to stop pulsation in the femoral, and in branches of the iliac, was carefully explained. He thought very highly of this method, as it was applicable both to amputation at the joint and excision of the head of the femur; he had used it himself successfully in two cases within the past year, availing himself additionally of the means of safety given by Esmarch's bandage.

Dr. Varick exhibited a Trendelenburg's rod or trocar, which he had made from a description of the instrument in foreign journals, and which he believed to be the first one made in this country. He had used the instrument successfully in one case.

Dr. Byrd, of Illinois, has used Lloyd's bandage as described, but uses a larger tube or elastic, and is very decidedly in favor of its use, fully agreeing with Dr. Wheaton in the great benefit to be derived from this method.

Dr. Dawson, of Ohio, in a case used an assistant's hand in controlling hæmorrhage, and thinks that in the future this operation can be made free from much of the risk of bleeding heretofore incurred.

Dr. McGraw, of Michigan, gave a case where he had used the rectal lever with success. In his last three cases of this operation, two had made a good recovery.

Dr. McLean, of Michigan, uses the abdominal tourniquet in his amputations at this joint, and always succeeds in controlling the hæmorrhage during the operation.

An Earthy Calculus in the Substance of the Liver.—Dr. Wm. A. Byrd, of Quincy, Ill., gave a full history of this very unique case. The patient was a male, aged about thirty years, who had been ill four months, apparently from malarial fever. Dr. Byrd opened the painful point over the liver, supposing it a simple abscess of the liver. In the course of his probing it one day, he discovered the presence of a hard substance, and extracted a calculus weighing 115 grains. He did not wish to state positively what the origin of the stone was, and desired to know, but no member could give information on the subject.

Branchial Cysts of the Neck.—Dr. W. Senn, of Wisconsin, after giving a list of the different forms of cysts of the region named, discussed the etiology and pathology of the branchial cysts. He believed they usually only contain the products of degenerated epithelial cells, unlike the mucous and dermoid cysts. The treatment by extirpation is really the only sure method, but is sometimes not possible, and in such instances the thick creamy fluid usually found within is to be drawn off, and an attempt made to set up an adhesive inflammation of the walls by injection of irritating solutions, which often require repeating. The German surgeons do not seem to expect much favorable result from injections.

Dr. Byrd thinks highly of electrolysis in treating these cystic growths.

Dr. Prewitt, of Missouri, said that Dr. Senn's views upon the origin of these cysts, although somewhat new to him, were undoubtedly correct.

Dr. Senn did not think electrolysis offered any hope in obliterating these cysts, and believed there was nothing equal to the radical operation of excision.

THIRD DAY.—May 8th.—Treatment of Hydrophobia, Historically and Practically Considered, was the title of a paper by

Dr. Chas. A. Dalles, of Pennsylvania, which he read only in part, as his time expired.

Gunshot Wounds of the Abdomen.—Dr. C. D. Parkes, of Chicago, read an epitome of his Address as chairman of the Section—his paper being based on nearly 100 experiments upon abdominal cavities of animals—the injuries being inflicted by gunshot.

[In consequence of the pressure on our space this month we are not able to fully report the other Sections, but will give next month an analysis of the more interesting papers.]

Editorial.

The American Medical Association, at its late session in Washington, D. C., was a grand success as to the number who attended. About 1,300 doctors from all sections of the country were present, according to the daily papers. It is a mortifying fact, unless the excuse of financial inability to attend is urged, that so few Southerners were present at this late session—especially when it was convened on the very borders of the Southern States and a Southern Doctor of world-wide fame was elected President—Dr. Henry F. Campbell, of Augusta, Ga.—to preside over the Session of 1885, at New Orleans. There were, of the 1,300 members in attendance, scarcely as many as 100 from all of the Southern States together. And yet the generous North and the great West came together to bestow the most distinguished honor known to the profession upon a truly born and thoroughly educated Southerner. How does such magnanimity speak for the brotherhood of practitioners throughout the United States? The “bloody shirt,” fortunately, was not raised between the doctors of the separate sections of the country during the times when patriotic blood flowed freely on either side for convictions each thought to be right. Southerners are glad to honor the eminent medical men of the North and West, whenever opportunity allows. They no less appreciate honors, unsought, that are bestowed upon them.

The President's Address, by Dr. Austin Flint, was characteristic of his ability. While we may differ in opinion as to some positions taken by him, we differ not as enemies, but as friends who are willing to take counsel from those with whom we are associated in a common cause. His reference to the New York Code was tempered by the affections of a father, and his remarks were properly lenient.

The papers read before some of the Sections were instructive, although, according to the opinions of some, "there was nothing new." How ridiculously silly! Let each honest reader ask himself, has he learned all that is old? He answers, he has seen the recommendations time and again in medical journals. But he ought to go a little further and ask himself if most of the editors of medical journals do not present something "new" in the pages of the columns they control. It is so easy to criticize; it is harder to give due credit for the suggestions expressed that lead to criticism.

In looking over the proceedings of the last day, we noticed that on one important resolution there were only forty-one voters, although it has been asserted that there were about 1,300 members present. Has it come to such a pass that doctors have turned to be politicians? We cannot object to the social features of any assembly of professional men. We make no complaint against the choice of individuals as to officials, and their *legally* earnest work for their friends. We have no desire to interfere with the *convictions* of others; but we have a right to present this view:—that when work is to be done, it should be attended to. It is as much the duty of the humblest member to attend all the sessions as it is that of the President of the body. Why leave the battle-field before the battle is fought? Such conduct manifests little interest.

One of the chiefest things that many doctors go to assemblages of such kind as this National Association for is that they may run for office and to "lobby" and "bargain." Have medical bodies come down to such a level? Why is it that the last day is not as well attended as the first, or second day? A clique is at hand; a caucus organized; a "new measure set afoot," to do what? That friends may be carried to the front—and the science and art of professional study is sometimes left too far in the background.

If such a failure of profitable result comes of organization, then societies ought to be abolished, and individual effort must be resumed.

Dr. Samuel D. Gross—the surgeon of the world—died before the telegram, expressive of the love of the profession and of their sympathy, reached him. There is a sentiment in death-bed requests, and, according to his often expressed desire, Dr. Gross was cremated. But as he manifested every proper appreciation of the profession while living, and as his grave could not have been honored more than by the erection of a monument or tomb stone, it was unfortunate to the

living that the resting spot of his mortal remains cannot be found in cemetery or church-yard. Our space here does not allow opportunity to write up the record of the surgeon who has just passed away. A short sketch of his honored life will be found in our obituary column.

Who can doubt the social features of the session? There were some, no doubt, under the impression that to enjoy the President's hospitality at the Executive Mansion would make them distinguished. Some had new suits of clothes and wished to show off the styles of their tailors; but how various was the cut of the coat, vest and pants. With all the handsome dresses of male and female that President Arthur is in the habit of seeing, can it be presumed that he will remember names because of his visitors' attire? While everything was elegant in the way of *public* display, it was plain that the *private* family dinners, suppers, etc., where so much of style was not expected, were far more enjoyable and tended mostly to the social pleasure of the session in Washington.

The question as to the future of the *Journal of the American Medical Association* is a very serious one to consider, and the Association did wisely in retaining, *vi et armis*, Dr. N. S. Davis, as Editor, for another year. While unwilling to join the minority of the Association who have personally expressed their disappointment as to the standard of the journal, we really believe that a more *friendly* expression of opinion—in the true sense of the term "friendly"—would have resulted in a far better exponent journal than has been published. Dr. Davis is the father of the Association. He is an able thinker and writer, and our only criticism upon his editorship of a *society journal* is that he ought not to attempt to impress his own opinions so urgently upon the profession. This *Monthly*, it is true, has referred to that authority on one occasion, but only once, when we thought such an opinion agreed with the common sentiment of the American Medical Association. Although much younger in the cause of the National Association than Dr. Davis, whose opinions we reverence, and for whose honorarium we would vote, so far as the Association can bestow it, we very much doubt if he properly voices the sentiments of the profession at large on some issues of medical politics. If not the only member, he is one of the *very* few doctors of the United States now living who entered actively in the organization of the Association nearly forty years ago. Dr. Davis deserves all honor and credit for the success of the Associa-

tion, and is entitled to any position of trust or emolument that may be in the gift of the body.

We have before stated our opinion that the Judicial Council—since there is no appeal from its decisions—should have a member from each recognized State and Territorial Medical Society having affiliation with the National Association. Without some such correction of the “Plan of Organization,” there will always be dissension. As regards the laws desired to be altered, amended or abolished, State Societies, in general, should instruct their members who may have been elected or appointed as members of the Judicial Council. Can not some such change as this be made? We believe, from conversations held with different members at Washington, that there is a very strong opinion in favor of something of the kind. Our whole desire is to see the Association prosper, and as long as there is any feeling on the part of delegates that there are anything like “star-chamber” proceedings, just so long will there be murmurs of discontent, however illy they may be founded.

We were pleased to meet many of our Virginia brethren at the meeting, but were surprised that more were not there—we doubt if there were twenty members of our State Society in attendance. Notwithstanding so few Southern physicians were present, the South fared very well in appointments, as besides getting the Presidency, our section of country received the honor of two Vice-Presidents, and three Section chairmen.

One of the evils seen at the late session was the fact that readers of papers did not all adhere to the twenty-minutes' rule adopted some years ago, and the result was that half the work expected was not done in the Sections, many papers having to be read by title only on account of lack of time. Another thing which caused some fault finding was the dilatoriness of most of the chairmen of Sections in preparing their programmes, most members not knowing what day they were to read their papers until they reached the place of meeting; the only Section which had its programme prepared before the session being that on Practice. It is greatly to be hoped that the new chairmen of Sections will remember the By-Law which covers this ground, and see that complete lists of all papers to be read next year are in the hands of the chairman of the Committee of Arrangements on or before the first day of April, 1885, that they may be printed and distributed to the members before the session opens.

Wm. Warner & Co.—Among the many valuable pharmaceutical preparations offered by this well known house, are what is known as “Parvules”—a form of small globule containing minute doses—and we desire to say a few words concerning them. Some few years ago, when Prof. J. Lewis Smith first brought forward the efficacy of frequently repeated small doses of medicine for children, we thought his ground well taken, but were surprised to find how exceedingly valuable that method of dosage was, and have since then entirely adopted it, and when Messrs. Warner & Co. offered their “Parvules” to the profession, we were fully prepared to use them. Since then we have employed them not only in a great many cases of children but also of adults, and like them better and better. In fact we make it a rule never to make a call where we expect to see a sick child without taking our parvule case with us. We fully believe in the employment of small frequently repeated doses for children, and know of no better form for administering such doses than that offered by the preparation referred to.

The Board of Visitors of the Medical College of Virginia held a meeting, according to appointment, on May 6th, 1884. Four new members qualified and entered upon the discharge of duty. The title of Emeritus Professor was conferred upon each of four Professors who have resigned during the past few years, namely, Drs. F. D. Cunningham, Hunter McGuire, Otis F. Manson and James B. McCaw. The election of Professors to fill the four chairs now vacant was postponed until an adjourned meeting on June 6th.

Iodia.—Dr. J. F. Goldman, Huntsville, Ala., says: “Was called to see a little girl, eight years old, on January 18, who was troubled with a vaginal discharge of buff color and almost creamy consistency.* She complained of pains in her back, hips and lower abdomen, very much as women do who suffer from leucorrhœa. Having had a case of gonorrhœa recently in a girl of similar age, I suspected something of the kind here; but examination proved the suspicion wrong. Further examination and inquiry convinced me that she was of a scrofulous diathesis, with a possible syphilitic origin. Knowing of no alterative so effective in scrofula as Battle & Co.’s Iodia, I ordered half-drachm doses three times per day. In a few days the discharge ceased, and all symptoms passed away.”

Cremation.—From a late editorial in the *Medical News*, we extract the following very pertinent remarks upon this important subject: The adverse action lately taken by the British Parliament upon the bill for legalizing cremation, was more than counterbalanced by the practical endorsement of the system in the case of the illustrious Gross, whose remains were cremated at Washington, Pa., in fulfilment of the expressed wish of the deceased. This celebrated example of consistent advocacy of an innovation founded upon strictly scientific and sanitary principles will exert a world-wide and potent influence in favor of the practice, which has much to recommend it, and which is especially applicable to the great centres of population. That there should exist a deeply rooted prejudice in favor of inhumation is natural enough, since the custom has been universally adopted by Christian nations for many centuries. It is not to be expected that such a prejudice, founded upon a universal sentiment, and fostered by the influence of long-continued habit, will yield lightly to arguments based upon expediency and the teachings of sanitary science.

The difference between inhumation and cremation is merely that of mode, the ultimate results being the same. The disintegration of the body in either case is produced by oxidation. In the one case by the slow and corrupt process of putrefaction; in the other by the rapid and purifying action of intense heat, the constituents of the body being converted quickly and harmlessly into gaseous vapors and ashes by the oxidizing agency of fire. From a sanitary standpoint, the advantages of the latter method of disposal of human remains are incomparably superior to those fancied to be associated with the common practice of interment. The sudden transformation to a mass of unrecognizable ashes of the forms of those we have loved and revered in life, and love to think of as slumbering undisturbed beneath the sod, does violence to our feelings and shocks our tender sensibilities. But did we reflect upon the ghastly picture of what actually happens when the body is consigned to the earth, there would be less reason to decry a practice which is scientific, rapid and complete in its execution, and which is devoid of danger to the living.

Cremation is beginning to be recognized as a necessity in very populous places. It rests upon the broad basis of verified sanitary principles, and must eventually succeed in its application among civilized people. The example which we have chronicled is notable because of the personage and of

its exceptional character. It is a grand illustration of the influence of a conscientious conviction, derived from an unbiassed study of the question, upon a mind of extraordinary grasp and foresight, and possessed of courage which was not deterred from acting upon such a conviction in the face of widespread prejudice. This closing scene in the drama of a great and eventful life is characteristic of the man, and will not be without its lesson of instruction.

Are You Going to Europe?—In another column will be found the announcement of Messrs. Thomas Cook & Son, Tourist Agents, 261 Broadway, New York, relative to the very complete arrangements they have made for tours in Europe the coming Spring and Summer. "Cook's Excursionist," containing maps and full particulars, will be mailed to any address on receipt of ten cents.

Churchill's Preparation.—I have used Churchill's preparation, as made by J. A. McArthur, with the most decided benefit, and am satisfied that a fair trial is all that is required to establish its therapeutic value. I have at this writing several cases in which the syrup is doing beyond my expectations.

PHILIP LEIDY, M. D.

Philadelphia, Pa., Feb. 6, 1884.

Obituary Record.

Samuel D. Gross, M. D., LL. D., D. C. L., (Oxon.) LL. D., (Cantab.)—At twenty minutes to one o'clock on Tuesday, May 6th, at his home in Philadelphia, this distinguished and venerable surgeon and teacher passed from this earth to a higher sphere, leaving behind him the record of a life well spent. Dr. Gross was born near Easton, Pa., in a farming community, July 8, 1805, and early in life received a literary and classical education at the Wilkesbarre, Pa., Academy, and the Lawrenceville, N. J., High School. Even before completing this portion of his studies he had determined to enter the medical profession, and on leaving school he went into the office of Dr. J. K. Swift, of Easton, where he studied medicine, afterward receiving private tuition from the celebrated Prof. Geo. McClellan, of Philadelphia. Jefferson Medical College was then in its early years of existence, and by advice of Dr. McClellan, who was deeply interested

in the welfare of that institution, the young student graduated from there in 1828. Dr. Gross began practice at once in Philadelphia, and improved the spare time which Nature kindly allots to the young physician, by translating several standard German and French medical works. He soon rose above the level of a mere translator, and within two years after receiving his diploma published his first original work—a treatise on “Diseases and Injuries of the Joints.” During this year (1830) he removed to Easton, but was called in 1833 to the Medical College of Ohio, accepting the position there of Demonstrator of Anatomy, and two years later, the Professorship of Pathological Anatomy. He at this time delivered the first systematic course of lectures on morbid anatomy ever given in this country, and yet found time to prepare and publish his second original work, “The Elements of Pathological Anatomy,” which was the first treatise on that subject written by an American. In 1839 he accepted the post of Professor of Surgery in the University of Louisville, lecturing in that institution for over ten years, until, in 1850, he received an urgent invitation from the Board of Trustees to accept the chair of Surgery in the University of New York, just made vacant by the resignation of Dr. Valentine Mott. This place of honor he occupied for only one year, because of the earnest solicitations of his former colleagues at the Louisville University for his return, and he taught at the latter school until 1856, when his *alma mater* demanded his presence as a teacher in the same halls where he had worked so faithfully as a student. He most worthily filled the chair of Professor of Surgery at Jefferson Medical College for twenty-six years, only resigning his active position in 1882, when he had the pleasure of seeing his son, Dr. Samuel W., succeed to his professorship.

Prof. Gross' life in Philadelphia has been eminently a busy one, as he has actively connected himself with the various local and national medical organizations since he settled in that city—being founder and President of the Philadelphia Pathological Society; President of the Pennsylvania State Medical Society; organizer and President of the American Academy of Medicine; founder and President of the American Surgical Association; chairman of the Teachers' Medical Convention; President of the American Medical Association; and President of the International Medical Congress in 1876.

In 1859 he brought out his standard work, the “System of Surgery,” upon which much of his posthumous fame will

depend, as it is without doubt the most complete and exhaustive work upon the subject ever written by one man. The "Surgery" has been translated into many different languages, and has passed through six American editions, the last one, in 1882, being thoroughly revised by the author. It would be impossible to give even a list of his other contributions to surgical science, on account of their number, but as an evidence of his industry and vitality, it may be well to mention the fact that he had prepared two papers for reading before the late meeting of the American Medical Association which was in session at the time of his death.

In 1872 he went abroad for the second time, and was greeted everywhere as the representative American surgeon, being the recipient of honors from the medical fraternity on all sides. In addition, the University of Oxford at this time conferred upon him the degree of D. C. L. In 1880, the University of Cambridge conferred upon him the degree of LL. D., which he had also already received from Jefferson College, and at the late Ter-centennial of Edinburgh University he was granted the honorary degree of LL. D. Foreign societies and other institutions of learning have honored him in many ways, as have also scientific, literary and medical institutions throughout the United States.

His accuracy of information and pleasing address made him a teacher of the very highest grade, and his skill as an operator, and high moral standard of character were both fully recognized by his classes. He was in the highest degree hospitable, and no foreign physician or surgeon of note visited this country within the past ten years without receiving from him a hearty welcome, whether bearing notes of introduction or not. The result is seen in the immense number of personal friends, not only in this but in other countries, who deplore their most serious loss. Although standing at the head of his profession, notwithstanding his age he was active in pursuing its duties—much more so than many men whose reputations are yet to be made—and hence the shock of his comparatively sudden death was felt a more than usually heavy blow to the medical fraternity.

In accordance with his often repeated request, after the autopsy his remains were taken to Washington, Pa., and there cremated in the Le Moyne furnace. The ashes were brought back to Philadelphia, and interred in Woodland Cemetery by the side of the remains of his wife. He leaves two sons and two daughters, one of the former—as already mentioned, filling the chair of Surgery at Jefferson—the

other a prominent member of the Philadelphia bar. The latter are married, one to Dr. J. P. Horwitz, ex-Surgeon-General of the United States Navy, and the other to Benjamin Horwitz, Esq., of Baltimore.

Dr. A. R. Mott, Jr.—At a special meeting of the Manhattan Medical and Surgical Society, called May 17th, the following preamble and resolutions were adopted:

Whereas, We have learned with profound sorrow and deep regret of the untimely death of our esteemed fellow-member and dear friend, Dr. Armistead Randolph Mott, Jr., who fell a victim to typhus fever, contracted in the discharge of his duties as Chief Physician to the Riverside Hospital, May 6th, 1884; be it, therefore,

Resolved, That in his death this Society deplores the loss of an earnest and valued member, and one who, by consecrating his best years to faithful work in a dangerous field, has honored his profession.

Resolved, That his associates mourn the death of one whose noble character had won their warmest affection, and whose devotion to his profession offers an example worthy of the highest emulation.

Resolved, That these proceedings be recorded in the Minutes of this meeting, and that a page of the Records of this Society be inscribed with his name and the dates of his birth and death; that a copy of these resolutions be forwarded to his bereaved family, and that we tender to them the sorrow and sympathy which we so deeply feel.

Resolved, That the editors of the *Medical Record* and the *Virginia Medical Monthly* be respectfully requested to publish these resolutions.

Williard Parker, M. D., LL. D., one of the foremost surgeons of New York city, died at his home there, April 25, 1884, aged eighty-four years. He graduated from the Medical Department of Harvard in 1830, and had been actively engaged in the practice of his profession until quite recently. During his fifty-four years of professional life he held Professorships of Surgery in the Berkshire Medical College, the Cincinnati Medical College, and the College of Physicians and Surgeons of New York. He was one of the best of teachers, but leaves behind him hardly any record as an author, his published writings being very few in number.

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Original Communications.

ART. I.—**Conduct of Protracted Labour.*** By WM. D. COOPER, M. D., Ex-President and Honorary Fellow Medical Society of Virginia, etc., Morrisville, Va.

The earliest information which we possess in regard to child-bearing is the curse pronounced upon woman “that in much pain she should bear or bring forth children,” as a penalty for her disobedience of the mandate of her Creator. But we also find that, when the chosen people of God had so greatly increased as to be a terror to their Egyptian masters, the king commanded the midwives to destroy all the male children. But the midwives evaded the command, with the excuse that the Hebrew women were so quick and lively in labour that the children were born before they could reach them. This shows one type or class of subjects with whom we have to deal.

But we find, again, that Rachael, whose labor must have been protracted and more than usually painful, “was assured by her attendant that she would bring forth the child,” which she did—at the sacrifice of her own life. This evidently shows the other type or part of our subject.

And now, as to the conduct of simple or natural labour, or the duty of the physician on entering the lying-in chamber.

* Read before the North-Eastern [Virginia] Medical Society, March 24th, 1884.

We expect to find the patient (it may be a modest, bashful young woman, a *primipara*), with a sense or feeling of great anxiety, suffering occasional pain. To gain her confidence and to enable us to quiet and control her anxiety and fears, it becomes us to be dignified and self-possessed, but not arrogant or dictatorial, not in too great haste to interfere with the patient or her arrangements, but cautiously and precisely to take in the situation, and, as opportunity offers, give kind assurances of sympathy, and with as much confidence as is honest, assure her of a safe termination of her troubles; and as soon as the external symptoms warrant, I think it always best to make a careful vaginal examination, and in doing so we should first ascertain the condition of the os tincæ (every practitioner or accoucheur having his own standard of dilatation and dilatability), and in this, our first examination, we should learn, if possible, the size and capacity of the pelvis. I do not mean by this that the physician should know that the antero-posterior or small diameter of the pelvis at the superior strait is four inches or more, and that the transverse or great diameter exceeds five inches, and that the oblique diameter is equally as great, but he must be satisfied that the capacity of the pelvis is sufficient for the passage of a child of ordinary size. Having learned this much, and being satisfied that labor has actually set in with proper and safe presentation, he must not be over-officious, lest he convert a simple and natural case of labor into a protracted and dangerous one, for, as I observed before, we should be firm, candid and feeling in our conduct, and not too much influenced by the anxiety of friends and importunities of the patient. And let me say here that, when we are satisfied that the condition of the patient does not require our immediate attention, to relieve ourselves of anxiety and the patient of restraint, it is usually well to administer an anodyne and retire from the room until such progress has been made in the case as will demand our services. But as this is supposed to be a simple, natural labor, which almost universally terminates favorably, it is needless for me to give further directions.

Now the question arises, what is protracted or unnatural labor? The distinction is altogether arbitrary, for every

practitioner of much experience fixes his own limit to simple or natural labour.

We find Hippocrates made two classes, natural and preternatural. Denman made four classes: natural, preternatural, difficult and complex. Baudelocque, three classes: natural, manual and instrumental. Conquest, Dewees, Blake and Merriman, divide them into natural and preternatural, and thus we find with other authors whose divisions are more theoretical than practical. I am expected, in this essay, as a basis on which to found our discussion, to divide labour into simple and protracted.

I do not presume that I am expected, to-day, to enter into any detailed account of the classification of the different authors, but simply to give my experience in the management of cases of labour which I might consider preternatural or protracted.

As intimated before, a simple, natural case, by our officiousness may be converted into a *protracted* one. For instance, we find a woman in labour: pains frequent and varying, mucous secretion in sufficient quantity, the mouth of the uterus partially open and dilatable. In our anxiety to have the head descend and, if possible, assist or hasten the delivery, we make frequent examinations, only to find, to our sorrow, that the mouth of the womb has become thickened, hard and tender, the vagina hot and dry, and every prospect for a speedy termination gone. This I will begin with as a case of protracted labour.

Formerly I bled, in such cases, and waited the result. Now I use chloral hydrate in full doses, so as to procure sleep, or, where there is no prejudice against it, I use chloroform, for, besides the anæsthetic effect of this remedy, I am inclined to think it excites voluptuous desires, and thereby restores the necessary mucous secretions, and after having regained this much we may safely leave the balance to nature, as a case of simple labour, having learned knowledge by experience. But we will find various causes of protracted or unnatural labor not of our own making, which we are called on to treat.

One—and, I may say, the most common, is *hæmorrhage*, or

flooding. This case needs no special diagnosis. It may be there has been bleeding for some days, which has become so excessive as to produce alarm. If we find the mouth of the womb dilated, or sufficiently dilated, and the head of the child still high up in the uterus, not even engaged in the superior strait of the pelvis, I think there should be no hesitation in introducing the hand, turning the child and delivering by the feet. But if the head is presenting and engaged in the superior strait, or pressing down in the vagina, I would greatly prefer using the forceps, for I am fully satisfied that the dexterous and skillful use of the forceps, in such a case, is equally safe for the woman and much safer for the child.

Again, a case of labour may commence naturally and seem to be progressing favorably, but from some unknown or unfavorable cause, *convulsions* may set in, or be threatened so seriously as to demand manual or instrumental assistance.

We find the mouth of the uterus but partially dilated, no possible chance of introducing the hand to turn, but still the symptoms urgently demanding that we do something to avert the impending danger. What must we do? Without any hesitation I would bleed, even to syncope, and if then the womb should not become softened and dilated, which it usually will, I would use chloroform, introduce the hand, turn and deliver by the feet, giving the forceps the preference under the same circumstances and for the same reasons as in the preceding condition.

But there is another class of cases which I would consider protracted or *tedious*, without being unnatural, which I think may be benefited, or the pain and suffering greatly alleviated. I think any case of labour lasting over eight or ten hours may be considered protracted or tedious, and produce, in many instances, what we might properly term exhaustion or inertia.

Now we find that each individual possesses different capacity for the endurance of pain consequent on labour, either from original stamina or the strain on the nervous system during the process of labor. Hence the most robust woman, as well as the most delicate, may become exhausted from the force or long continuance of the labor. I do not mean the

mere loss of strength in the muscular organization, but a state of inertia of the uterus itself. For how often have we seen cases of labour commence with all the symptoms favorable for a speedy termination of the case, and the pains gradually become less frequent, the patient listless and impatient. Upon examination we find the os uteri pretty well dilated, the head of the child high up and receding after each pain, the membranes not ruptured, the uterus evidently filled up with a quantity of liquor amnii; the membrane being ruptured, the waters are discharged, to the great relief of the patient, the pains are renewed and the labor progresses to a favorable and happy termination. There are still other cases of exhaustion where the waters have already been discharged, the head presenting at the superior strait, the os partially dilated, entirely dilatable during the interval, but with each pain and effort on the part of the woman, the os seems to close and prevent the head from engaging in the pelvis. The woman complains of a feeling of exhaustion, is restless, irritable and importunate.

During the first stage of such a labour we have already used anodynes: chloral hydrate and perhaps chloroform. Ergot is hardly admissible (if admissible, inefficient), as the circular fibres of the womb are wont to contract with considerable force, without a corresponding action of the longitudinal muscles. Quinine, as you are well aware, has of late, as an oxytocic, received considerable attention, and has been highly recommended in cases of exhaustion or inertia, and I have myself seen its beneficial action in some cases. But it cannot be relied on with any great certainty as a uterine stimulant.

In this case the question arises, what do we gain by delay, and which is the greater risk. (I mean the irritation of the uterus from the constant and continued action, which may result in peritonitis or metritis, and entire prostration of the nervous system subsequent to delivery, or the termination of the case by manual or instrumental delivery.) This I consider a typical case for the use of the forceps, which I greatly prefer to turning, because, by a skillful and dexterous use of the instrument, the woman is subjected to much less pain

and danger, whilst the safety of the child is almost a positive certainty; whereas, in turning, as every practitioner knows, there is very great danger to the child, from the pressure on the umbilical cord during the transit of the head through the pelvis and soft parts.

Again, the head may have engaged well in the superior strait, and passed down into the pelvis, perhaps impacted. The head may be of unusual size, or at least disproportioned to the capacity of the pelvis. The patient may have been in labor several days, making very little or no advance. The constant pressure from the *vis a tergo* is likely to produce vaginitis, sloughing and pelvic cellulitic abscess, and perhaps (which which would be deeply deplored), "vesico or recto-vaginal fistula." Nothing, it seems to me, is plainer, in all the duties of the kind and sympathizing physician than at once to resort to instrumental delivery.

In introducing the forceps I would use the utmost caution, especially in the superior strait. I think it advisable not to use anæsthesia until the forceps have been adjusted, which should be done during the interval of the pain. If the head is very high up, it will be necessary to have the entire concurrence of the woman, so that we can accommodate her position to the direction of the instrument. Having properly adjusted the instrument, I then administer chloroform, which I prefer to ether. This does not arrest the periodical action of the uterus, which I carefully consult, and then use traction effort only during the pain. Having now fully engaged the head in the pelvis, it may be necessary to remove the forceps and, if the pains are sufficient, to terminate the labor without further assistance. I only watch the progress and carefully guard the perineum, having previously applied cloths saturated with hot water, as a relaxing agent, and lubricated the parts well.

This now leaves the head in the same position as just described, to wit: fully engaged in the pelvis, and if the *vis a tergo* is inadequate to finish the labour, we can aid with the *vis a fronte*.

Now, apart from the distress of the constant and excruciating pain and the frequent and urgent importunities of the

patient, the gratification which we enjoy in being able to accomplish a speedy and safe delivery should prompt us to act at once and decidedly. I would not be understood as advising the indiscriminate use of forceps, for I am well persuaded that, in the hands of unskillful and bungling operators, they are capable of doing great harm. I have seen young men perfectly familiar with the anatomy of the pelvis, understanding labour in all its physiological relations, attend a lecture on the mechanism of labor, as explained on the manakin, with the flap turned back, showing the rotation of the head on the different planes of the pelvis, and the relations of the axis to those planes, leave the lecture room with no idea whatever of the mechanism of labor, simply because they had no mechanical genius. I would not advise such practitioners to use the forceps, if they can get some one else to use them in their stead.

Before using instruments in such cases, I would advise the cautious and moderate use of ergot, but it, to say the least, is a very uncertain and unsatisfactory remedy in increasing uterine contractions previous to delivery, although it may be very efficient after delivery, when hæmorrhage may be threatened, for it is then that its peculiar property of promoting tonic contraction is so valuable.

Change of position may also be resorted to with some prospect of increasing the force and power of the contractions; and still another remedy, which I find is increasing in favor with the profession, I have been practicing for a long time. I mean "manual pressure as a means of increasing the uterine contractions," which may be so applied as to simulate very much the natural process of labor, and, in the opinion of some, is destined to entirely supersede the use of ergot, as an oxytocic. It is needless for me to describe the mode of using this pressure, which will readily present itself to the mind of every intelligent accoucheur, as well as the indications for its use.

There is still another trivial cause of protraction or delay which I should mention. We frequently find that when the mouth of the womb has pretty fully opened and the pains are regular and unusually severe, the anterior lip of the uterus

with each and every pain is firmly pressed between the head of the child and the pubis, and the longer it thus remains the more tender it becomes, but by gentle pressure during the intervals, it seems to recede, only to return again with each pain. Now I think as soon as this condition is discovered, we should by firm but gentle pressure with the finger (being careful not to scratch or wound the parts with the finger nail), force it up over the head, at the risk, apparently, of impeding the descent of the head for a short time, for I am well satisfied in my own mind that this continued pressure is a fruitful source of many of the ailments of the womb which we are afterwards called on to treat, such as ulcers, fissures, etc.

Then again, we find the mouth of the womb fully dilated and entirely soft. The neck does not seem to have been obliterated, but descends into the vagina with the head and is a serious cause of delay. It is in such cases that I find not the slightest difficulty (if not relieved by manual pressure), in introducing the forceps, when the mouth of the uterus will easily glide over the head and we can at once accomplish delivery, with entire ease and safety. Now to illustrate, we will suppose the head as a round or oblong ball, pressing in great force against the perineum, from within, with each contraction of the womb, assisted by the bearing down pains of the woman, which is firmly resisted by the unyielding perineum until finally overcome by positive force, or with, perhaps, a partial separation of its fibres, whereas, with the forceps, introduced from without, we form within the vagina, instead of the ball or round head, a wedge-shaped dilator, which may be used and controlled at our pleasure, in dilating the perineum and bringing down the head, with perfect safety, to the soft parts.

From what I have said it may be inferred that I am an advocate of instrumental assistance, in protracted labor, and to corroborate the views I have advanced, it may be expected that I shall quote some authorities on the subject; but as you all well know, the time and opportunities of a country physician entirely preclude the collection of such testimony, and as I stated in the beginning of this article, I set out to give you only my own experience.

But I will simply state that the change which the mind of the profession has undergone, in the use of obstetrical instruments, within a comparatively short time, cannot be better illustrated than by reference to some reports from the Rotunda Lying-in Hospital, some forty years ago, where the forceps were used only once in 310 labours. A later report, some ten years ago, shows that Dr. Johnston, the then master of the institution, used them once in eight labors.

But I have said enough, if not to instruct and enlighten you, gentlemen, I hope as a basis for a discussion which may elicit from the experience of each one such thoughts and expressions as may be of mutual benefit; and if I have failed in that, I thank you for your patient indulgence and hope to have mingled, with your criticisms, your sympathy and forbearance.

ART. II.—**Surgical Delusions.*** By JOHN B. ROBERTS, M. D., Philadelphia, Pa., Professor of Anatomy and Surgery in the Philadelphia Polyclinic.

Many surgical theories and procedures have become traditional, and are accepted as true and correct, merely because reverence for antiquity or careless acceptance has not questioned their right to be classed as surgical facts. The present age is an incredulous one, and demands accurate investigation of all such claims. The field of investigation is large, for progress has been retarded by the influence of theorizing writers with mono-chromatic vision, the example of non-seeing and non-looking devotees of the fetiches of surgical superstition, and the convincing effect of a repetition of false statements. I shall select a few topics which have greatly interested me, and concerning which I probably differ quite widely from many of you.

Chloroform Anæsthesia.—Many still cling to the delusion that chloroform is a safe anæsthetic, because they have never seen a patient die from it. Is one man's experience to weigh against the physiological, the experimental, the clinical experience of the whole world? Dare we employ chloroform

*An Abstract of the Address in Surgery read before the Medical Society of the State of Pennsylvania for 1884.

instead of ether, when recognized authorities state that in chloroform anæsthesia death occurs without warning in the hands of experienced administrators?—when some five hundred deaths have already been reported?—when Schiff and Dalton reject it in physiological laboratories because of its mortality?—when the Scientific Grants Committee of the British Medical Association asserts that chloroform is a more dangerous anæsthetic than ether? Adherence to chloroform in the face of such facts is criminal when circumstances permit ether to be obtained. The assertion that it is often impossible to produce anæsthesia with ether is the result of inefficient methods of administration. Ether, if given as chloroform is and should be given, is in truth a useless anæsthetic, but given properly it is efficient.

Value of Styptics.—The belief in the necessity of styptics is a delusion less dangerous than that just mentioned, but is given more extended credence. Such agents are seldom—probably never—needed in general surgery to arrest hemorrhage. When ligatures, torsion or acupressure is not demanded (and such is seldom the case unless the artery is as large as the facial), moderate direct pressure applied in dressing the wound is the only hæmostatic required. Styptics often do harm, and, as they are not needed, they should be discarded.

Fatality of Small Hemorrhages.—There is much misapprehension about the quantity of blood that a healthy man can lose with impunity. Many who often look with equanimity upon a parturient woman losing a pint of blood from the uterine sinuses, would be dismayed at a man losing half or quarter that amount during removal of a tumor. While not advocating needless waste of blood, and especially in patients suffering surgical shock, I assert that there is an unnecessary fear of blood spurting from a few insignificant vessels. The largest artery can be controlled by pressure not greater than is used for ringing the electric bell in your hotel; hence there is always sufficient power in your fingers to obviate fatal hemorrhage until ligatures can be obtained and applied.

Danger of Trephining the Skull.—The dislike to make exploratory incisions in closed fractures of the skull evinced

by some surgeons, and the objection of others to trephining, and thus opening the diploic structure in open fractures, are delusions of a most disastrous tendency. To wait until symptoms of cerebral compression or inflammation have supervened is to lose the most favorable opportunity for mechanical relief. Such a Fabian policy is often followed by death. The treatment of open and of closed fractures of the skull should not be looked upon as very different, since, with the present improved methods of dressing wounds, the successful issue depends almost entirely upon the cerebral rather than the cranial phase of the injury. If such fractures as we usually see in the skull were not in proximity to the brain, the surgeon would consider them almost trivial. The feature of closed fractures that renders them so troublesome is the obscurity that accompanies them. I have for a number of years strongly advocated making closed fractures open ones, by means of an exploratory incision, whenever there is a suspicion of the existence of depression or splintering. In open fractures, operation to elevate depressed portions and get rid of splinters of the riven table thrust into the membranes, should be undertaken rather than avoided. It is better to err on the side of action than that of inaction. Careful manipulation and proper dressings at an early stage are sources of less risk than is incurred by the surgeon who leaves unseen and unsuspected fragments thrust into the membranes or brain.

Operative Delay in Strangulated Hernia.—A similar delusion of fatal issue is that leading to postponement of operative interference in strangulated hernia. Repeated attempts at forcible taxis and medical pow-wow with temporizing measures have ended more lives than the use of the knife. Herniotomy done within twelve hours is almost always followed by recovery. Death is to be expected, however, if strangulation has existed for two or three days, and the gut has been bruised by violent manipulation in the endeavor to relieve the constriction by taxis. Taxis under ether, a half day's treatment with cold applications, the internal use of morphia, and a second moderate attempt at taxis, followed (if unsuccessful) by immediate operation, is the sequence to

be followed in strangulated hernia. When symptoms of strangulated hernia exist, the slightest fullness and tenderness in one groin over either of the rings is a sufficient localizing indication to warrant operation.

Operative Delay in Acute Phlegmonous Inflammation.—No insane delusion, no Spanish inquisition, ever caused so many hours of excruciating physical torture as the hallucination that acute abscesses and furuncles must not be incised until pointing has occurred. All the world knows that evacuation of imprisoned pus in phlegmonous inflammations means instant relief of the agonizing pain; yet how few of the profession early and freely incise such inflamed tissues unless they first see the yellow pus under the thinned skin or feel the fluctuation of the fluid in the abscess cavity! The pain is caused by the effort of the pus and sloughing tissue to escape. Is it not, then, more rational to make a free incision to-day than to wait until next week? Time and pain are both saved by early incision, and if the cut is made before the pus has actually formed, so much the better. Probably no form of abscess needs early and free incision more imperatively than that under the palmar fascia. Destructive burrowing of pus is prevented by this radical procedure, and it also saves the patient many days of poultices and purgatory.

Operative Delay in Malignant Tumors.—Much bad surgery results from a delusive postponement of operative interference in malignant diseases. Instant removal should be practiced in such cases, provided the patient is deemed fit to stand the surgical shock.

Necessary Fatality of Traumatic Tetanus.—That traumatic tetanus is of necessity fatal is a commonly-held opinion. Proper treatment is sometimes neglected because of this belief in its hopelessness. That the prognosis is extremely unfavorable I admit, but that cases of a severe type recover is undoubted. Chloral hydrate in full doses has given the best results, but I do not purpose speaking of therapeutics at this time; I merely wish to impress upon the profession the fact that a fair number of cases of traumatic tetanus recover.

Fatality of Pericardial and Cardiac Wounds.—The prevalent notion of the excessive danger of these wounds is delusional—at least in as far as it teaches that these structures will not brook surgical interference. The pericardial sac should be dealt with exactly as the pleural sac—by aspiration, incision, irrigation and drainage, according to the lesion. That simple puncture or aspiration of the heart itself is not accompanied by the expected risk to life has been pretty well shown, though I am not prepared to recommend its general adoption for trivial cardiac conditions.

Symmetry of Normal Limbs.—Another delusion still existing in many minds is that the lower extremities are usually of the same length. Clinical and anatomical investigation show that a symmetry in the length of normal limbs is of common occurrence; therefore measurements of the legs in cases of fracture are of little value, since it is impossible to know whether it is the femur of a long or a short leg that is the seat of injury.

Uselessness of Treating Vicious Union of Fractures.—It is a fact not sufficiently appreciated that many cases of deformity from imperfectly treated fractures of long bones can be remedied by re-fracture. Over and over again have I seen cases of grave disability and deformity cured by the application of sufficient force to break the callus uniting the misplaced fragments. Five or six months is not too late to resort to this expedient for correcting what otherwise must be a life-long evidence of defective surgical attendance.

There are many other prevalent surgical delusions—such as, that bony union of transverse fractures of the patella and of intracapsular fractures of the femoral neck cannot take place; that chronic purulent discharges from the ear do not need active treatment; that hypermetropia and hypermetropic astigmatism can be properly estimated and corrected without paralyzing the accommodation; that it is improper to perforate the nasal septum in cases of great deviation; that crooked noses are not amenable to treatment; that corneal operations and cataract extractions should be treated by cotton padding and bandages to the eyes; that fractures should be treated with carved or manufactured splints.

While an earnest advocate of conservative and of reparative surgery, I believe that when operative surgery is demanded it should be aggressive. Delay, indecision and inefficiency impair the value of much surgical work, and are often the legitimate result of a superstitious faith in delusive surgical dogmas.

Clinical Reports.

Retroflexion of the Gravid Uterus.—Death of Fœtus at Fourth Month.—Obstinate Vomiting.—Blood Poisoning.—Artificial Abortion. By HORATIO R. BIGELOW, M. D., Washington, D. C.

Mrs. R——, a robust lady of thirty years, in good financial condition, free from the cares of domestic duties, and with no especial irritating excitements, consulted me last November.

History.—She was married when twenty years old. Had always menstruated regularly and sufficiently from the age of fifteen. Had never been seriously ill, and inherited a strong constitution. Her first child was born eighteen months after marriage. Labor normal. Her second labor, three years after the first, was also normal. Had been treated at irregular intervals for slight retroflexion, but had not suffered any very marked discomfort. Missed her last period in August. Coitus with husband just after July period. Quickening felt last week in October, lasting for a few days, and then ceasing. Vomiting excessive and not controlled by usual remedies. Progressive emaciation. Slight offensive discharge from vagina. More or less hectic, with ill-defined rigors during the evening. Large boils on face and trunk. Shortness of breath and general appearance of apprehension. Rectal and vesical tenderness. Sub-acute peritoneal pains. Cystitis. Sacral and lumbar neuralgia, and a long list of anomalous aches and pains characteristic of a dislocated uterus. Upon examination, I made out a tumor in Douglas's *cul de sac*, with the usual signs of uterine tissue. The vulva was œdematous. The cervix and meatus behind the symphysis, and the perinæum were distended by the fundus uteri. The uterus itself was bound down by inflammatory adhesions. Examination of the urine showed mucus, pus and some slight trace of blood. There were two angry boils on the face, one on the left

breast and one on each thigh. She had been unable to retain nourishment for a long while.

With such a condition of incarceration, any attempt at replacement would have been worse than useless. The patient's physical condition was so extremely bad and the symptoms were so urgent that I was unwilling to subject her to the experiment of usual methods in inducing abortion, because I was satisfied that they would prove to be unavailing. I could not afford the time necessary, since it would be at the expense of the woman's vitality, and whatever plan was adopted must be effectual and immediate. To lessen the size of the uterus, thus diminishing the pressure, by puncturing the membranes through the os uteri, would have been an exceedingly difficult, if not impossible procedure, even with a curved sound. The cervix was so high up behind the pubis that it could not be satisfactorily reached. I therefore determined to draw off the liquor amnii by aspirating the uterine walls through the vagina. I sent the patient home, telling her to go to bed, and explained the nature of the undertaking. She absolutely refused to submit to anæsthesia. In the afternoon, with a Reynders' aspirator, I punctured the uterus through the uterine walls, drawing off a large quantity of liquor amnii. Previous to this I evacuated the bladder with a flexible catheter. The rectum was already empty. There was little pain, and the patient did not seem to suffer any especial discomfort. The subsequent pains were feeble and irregular, but the reduction of pressure was such that I was able to catch the posterior lip of the cervix with a tenaculum, and by tilting it downward I succeeded in getting the smallest size of a Barne's colpeurynter well into the canal. The dilation went on rapidly and well, but the patient became greatly exhausted and I was obliged to give her several hypodermics of brandy. When the dilation of the os had reached its maximum, I gave full doses of ergot. The aspiration took place at 3 o'clock in the afternoon. Just before midnight she had a severe pain, and the contents of the uterus were expelled with much force—a gush of nasty offensive blood, pus and debris. The fœtus was macerated, with a stale, disagreeable odor. The umbilical cord was reddish-brown, withered and discolored. The placenta was undergoing degeneration. I washed out the ulcers and vagina with a 1-1000 per cent. solution of corrosive sublimate and disinfected all napkins in the same solution. The uterus contracted slowly but surely. She was given a rectal suppository of quinine and opium, and small doses of brandy, milk and

beef tea at regular intervals. I was sent for at eight o'clock the next morning. Patient extremely weak. Constant retching. Pulse and temperature high. Uterine discharge slight and offensive. For forty-eight hours the uterus and vagina were washed out every third hour with the antiseptic solution. Gave hypodermic injections of phenic acid, with ten grains of quinine morning and night, until she had taken *sixty* grains. During my absence for necessary rest and professional duties, the syringing was conducted by a thoroughly competent nurse. Ordinary remedies failing to relieve the nausea, I gave twenty grains of lacto-peptine every five hours, which worked so nicely that I was able to nourish the patient in small quantities at frequent intervals. The nausea, which had been a prominent and distressing symptom, once relieved, there was a firm foundation upon which to build, and while the patient's recovery was tedious, it was absolute. The intervals between the uterine injections were lengthened until the solution was used in the vagina only.

The strength of the antiseptic was more pronounced than I am in the habit of using, but with such a nasty condition to contend with, I was unwilling to trust to anything weaker. In two weeks the patient took twenty hypodermic injections of carbolic acid, which were invariably given through the abdominal parietes. The uterus is still retroflexed and occasionally the patient breaks out with large suppurating boils.

This case is especially interesting because of its infrequency. The autogenesis of septicæmia, in puerperal women, is not a point in question. There was more or less absorption, through the gaping uterine sinuses, of the putrescent contents of the cavity. The field was a rich one for degenerative blood changes, as the patient was *in extremis* from inability to retain nourishment, and from excessive nervous debility, due to such mal-nutrition. A gravid uterus incarcerated and bound down is an unpleasant complication, and I know of nothing else to do for its relief than to aspirate through the vagina or rectum.

Airesipelas.—Dr. William H. Lopp, of Columbus, Ind., in his paper on Quacks and Quackery in Indiana in the Transactions of Indiana State Medical Society of 1883, relates "that one of the bogus M. D.'s, in a case of erysipelas, stated to the patient that it was called 'airesipelas,' because it travelled in the air—therefore was catching."

Original Translations.

From the French and German. By WM. C. DABNEY, M. D., Charlottesville, Va.

The Influence Exerted in Hysterical Attacks by Removal of the Ovaries.—At the meeting of the Société de Chirurgie on the 5th of March last, there was an interesting discussion of this question. It was opened by M. Pozzi, who stated that he had recently removed a uterus containing a fibrous tumor, and at the same time a cystic ovary, from a woman who had been suffering for ten years with copious metrorrhagia and acute pains in the pelvis. For some time, also, she had suffered with brain anæsthesia and had frequent hysterical attacks. The operation was easy and the cure rapid. After the second day the nervous phenomena disappeared and did not return. The disappearance of the nervous troubles was explicable, he thought, in two ways, both factors, probably, being instrumental. In the first place, the shock of a grave surgical operation will sometimes cause a temporary or even a permanent arrest of nervous attacks. Secondly, the removal of the utero-ovarian apparatus would probably have a similar result. The latter was, in his opinion, the most efficacious in the present case. At any rate, the case was worthy of note as a contribution to the literature of this vexed question.

M. Terrier said, that theoretically, the removal of the ovaries ought to have a most happy influence on the nervous attacks, but the question, he said, was far from being settled. Such was his conviction of the value of Battey's operation that, should a suitable case present itself, he should not hesitate to practice it, and on one occasion he had proposed it to one of his patients, but she was unwilling to submit to it. He mentioned a case, however, similar, in some respects, to M. Pozzi's, in which the result, so far as the hysterical symptoms were concerned, had been exactly the reverse of what was observed in Pozzi's patient. In this case he removed a cystic ovary from a woman who had never given any evidences of the hysteric temperament, but afterwards she had been subject to violent hysterical paroxysms. It is true only one ovary was removed, and it was possible, of course, that the uterus might have been diseased.

M. Reclus said that he had recently removed, at the Salpêtrière, both ovaries from a woman manifestly hysterical. During the next few days the woman had very violent at-

tacks which seemed to be the result of the operation. Three weeks after the complete cicatrization of the abdominal wound the attacks began to improve and the patient left the hospital much better. Sometime afterwards she returned and reported that while the nervous attacks had not entirely disappeared, they were much less frequent and less severe.

M. Gillette said he was not a partisan of Battey's operation. The indications for its performance were as yet too vague and its results too unsatisfactory to justify its performance. Observations made abroad had not convinced him of its efficacy, and the only two operations of which he had any personal knowledge which had been performed by a French surgeon were far from encouraging, the result in one having been absolutely negative. The dangers, he thought, far outweighed the possible benefits of the operation.

M. Ferrier maintained that in recorded cases where Battey's operation had been performed the ovaries were diseased, adherent and very difficult to extirpate. These were, he thought, just the cases in which surgical interference was justifiable. He had proposed the operation for rebellious menorrhagia, and Duplay had practised it for the same trouble.

M. Polaillon considered the operation perfectly justifiable. —*Gazette Hebdomodain*, March 21st.

Therapeutic Applications of Resorcine.—In the *Gazette Hebdomodain* for March 7th is a very full account of the physiological effects and therapeutic uses of resorcine, by Dr. Ernest Labbé. The first part of the subject, while it possesses much interest, need not detain us. The second part, namely the therapeutic applications, gives, however, in a condensed form, all that is known on the subject.

The therapeutic applications of this drug are based, he says, on its antiseptic and antithermic properties. In this respect it approaches in its action carbolic acid and salicylic acid, especially the latter. Like these drugs it has been used in certain infectious diseases.

In *typhoid fever* it has been employed with the view of destroying the infection principle and of lessening the temperature. The reports on the subject have not been very numerous, but all or nearly all have been unfavorable to the use of resorcine in this disease. The lowering of the temperature was never very great, and was, besides, quite uncertain. In addition to this, there was no evidence that the patients were benefitted in any way, or that the course of the disease was shortened. The amount of the drug administered was five or six grammes a day, in divided doses.

In *intermittent fever* very encouraging results have been obtained from the use of resorcine, and Kahler of Prague, considers it equal to quinine as a febrifuge in this affection, and recent observations made by Bassi, Righi, Lichtheim and others, leave no doubt as to its value. It is much more rapid in its action than quinine, and hence may be given at the commencement of a paroxysm with good prospect of cutting it short, or, at any rate, mitigating its severity.

It has been recommended, also, in diphtheria and other forms of simple sore throat. In the latter class of cases it is used locally, being applied directly to the mucous membrane of the pharynx. In graver cases of diphtheria, Justus Andeer has found it very useful when given internally. He claims that, in 222 cases, the result was uniformly satisfactory. [Labbée wisely says that such remarkable results can hardly be credited, and suggests the possibility of an error in diagnosis. It should be remembered, too, that many of the German school class the ordinary follicular sore throat, which is a perfectly harmless disease, with diphtheria, and errors would naturally occur as a consequence.]

In erysipelas, resorcine was found useless when given internally, but Bogusch denies that, when injected hypodermically, in the way that carbolic acid has been used, it has given any good results. He advises that a five-per-cent. solution be employed for this purpose, and that injections be made just outside of the inflamed area, and he states that the temperature is notably lessened thereby. Favorable results have been reported from its use in cholera infantum. Totenhofen had a death rate, in this disease, of fifteen and four-tenths per cent., under the use of resorcine, while, under the use of other remedies and modes of treatment, it was thirty-four per cent. It caused a cessation of the vomiting, a diminution in the number of stools, and recovery ensued in a short time. The dose varied from nine to thirty centigrammes (one and one-half to five grains about), according to the age of the child, the vehicle being infusion of chamomile.

Quite recently a Brazilian physician, Moncorvo, who has prosecuted his therapeutic researches with much ardor, has proposed resorcine as a remedy for whooping cough. He recommends the application of a one per cent. solution to the orifice of the glottis, by means of a little drop tube. This procedure should be repeated every two hours, day and night, for a month! when the case will be cured. He thinks the agent acts locally by destroying the micrococci.

It has been recommended, also, in acute articular rheumatism, but it is far inferior to salicylic acid in this disease.

Peritoneal Transfusion.—At a recent meeting of the Académie de Médecine a paper by M. Hayem was presented in which he gave an account of some experiments recently made on peritoneal transfusion. The conclusion at which he arrived was that this method was equivalent to venous transfusion, except that it was very much slower in its action.

The matter was also brought up before the Académie des Sciences, and M. Richet, who had been directed to report on M. Hayem's paper, stated that the absorption of blood in the peritoneal cavity was always slow and dangerous, and hence was not to be recommended.—*Le Progrès Médical*, March 29th and April 5th, 1884.

Removal of Tubercular Ganglia of the Neck.—At a meeting of the Société Anatomique de Nantes, held on the 12th of March last, M. Heurtaux, presented two large tuberculous glands, the size of a small orange, which he had removed from a young woman of nineteen years. These enlarged glands were situated near the angle of the jaw, were movable and covered with sound skin. They had become very painful. There were similar enlargements in other parts of the body, but the patient would not consent to their removal.

M. Heurtaux then went into a consideration of the propriety of removing tuberculous glands, his remarks being based, in great measure, on his own experience in the matter. He thought they should be left unmolested when they were small, painless, were not threatened with suppuration, and especially if there was any ground to hope that they would be absorbed. Then it would, he thought, be improper to attempt to remove very large glands, especially if they had been discharging pus for some time and were adherent to the surrounding structures. But in those cases which fill in a class intermediate between these two extremes, where the tuberculous glands are painful but not suppurating, and where they are not very large, but where there was no reasonable ground to hope for absorption, he thought an operation for their removal was called for. The patient, from whom the glands which he presented were taken, was in this "intermediate" position. A large excavation was left, which, however, healed quite rapidly by granulation.

Tuberculous glands are distinguishable from those which are simply hypertrophied, by the fact that the latter are never painful.—*Gazette Médicale de Nantes*, April 9, 1884.

The Operative Treatment of Purulent Pleuritic Exudations in Children. By Dr. Schenker in Basel. (*Jahrbuch für Kinderhikunde*, xx. Ba. 2.)

After a very complete and thorough review of all the surgical measures which have been proposed for the relief of empyema in children, since the days of Hippocrates, the writer of the present paper proposes three questions for consideration.

1. *When* should a child suffering from empyema be operated upon?

2. *How* should it be operated upon?

3. *Where* should it be operated upon?

In answer to the first question, he says that the patient should be operated on so soon as there is distinct evidence of pus in the pleural cavity, and in order to determine the character of the fluid, he recommends an exploring puncture as furnishing information far more definite than can be had from any symptom or set of symptoms which may be present. This exploring puncture, he thinks, is best made by means of Fraentzel's exploring trocar [which is very fully described in the chapter on empyema in Ziemssen's *Encyclopædia*—W. C. D.]. The puncture is best made at the point where the operation is to be done, in case pus is found in the sixth, seventh or eighth intercostal space behind. It is better for the little patient to be in the sitting position, since the discharge of pus is facilitated by it. Slight narcosis should be induced first, if the cutting is decided upon.

"Thoracotomy," nearly always, he says, gives good results. After the incision is made between the ribs a canula should be inserted and allowed to remain for a time. Subsequently this is replaced by a piece of ribbon, drainage tube or Nelaton's catheter. Resection of the ribs is seldom necessary. Simple aspiration should never be resorted to for purulent effusions.

[The author differs with many other writers on the subject on one or two points: with respect to aspiration, for example, it is generally conceded that it is justifiable to attempt to cure empyema *in children*—not in adults—by it, and it has frequently been successful. A hypodermic syringe will in most cases do excellent service as an auxiliary instrument, without having recourse to the complicated trocar of Fräntzel. In one case, however, occurring in an adult, I have seen the pus so thick that it could with difficulty be made to flow through an aspirating needle of pretty large calibre.—W. C. D.]

*Proceedings of Societies.***VIRGINIA STATE PHARMACEUTICAL ASSOCIATION.**

(From our Special Correspondent.)

LYNCHBURG, VA., May 23, 1884.

The third annual meeting of the Virginia State Pharmaceutical Association commenced its sessions here Tuesday, May 20th.

The first meeting was a public reception, held in the new opera house, and largely attended by the ladies and gentlemen who compose the best society in this city.

The meeting was called to order at 5:30 P. M. by the President, Mr. C. A. Santos, of Norfolk, and opened with prayer by the Rev. Mr. Acree.

Mr. W. A. Strother, of the local Committee of Arrangements, then introduced the Hon. John W. Daniel, who made an eloquent address of welcome, which was replied to by the President of the Association, Mr. Santos; after which the Executive Committee made their report, and then the meeting adjourned to convene next day at 10 o'clock for business.

The floral decorations on the stage, which were symbolical, comprising scales, mortars, etc., made of flowers, were very handsome, and the intervals of the exercises were enlivened by the music of the orchestra.

The first business session of the Association, held in the Tunstall House, on Main street, was called to order Wednesday morning at 10 o'clock, by the President.

Mr. Thomson, delegate from the Maryland State Pharmaceutical Association; Mr. Sayre, of the Pennsylvania State Association; and Mr. Marstello, of the South Carolina State Association, were received and accorded seats and privileges.

Congratulatory telegrams were ordered to be sent to the Louisiana, Kentucky, New Jersey, and Mississippi Associations, which were holding their annual meetings.

The Executive Committee presented a list of applicants for membership, all of which were elected except two, these not being eligible under the constitution.

The reading of the President's Annual Address being next in order, and that officer being too unwell to comply, it was postponed for a future session, and the First Vice-President, Mr. Hugh Blair, of Richmond, was called to the chair.

The reports of the Secretary, Treasurer, and the Committee on Legislation were read and disposed of in the usual manner.

Colonel John B. Purcell, of Richmond, chairman of the Committee on Legislation, in his report regretted that the committee had failed to secure the passage of the proposed "pharmacy bill" at the last session of the Legislature, the bill having passed the Senate without any difficulty; but the committee were unable to get it through the House. Colonel Purcell explained the causes which conspired to defeat the bill, and recommended a new line of policy in dealing with the next Legislature. Discussion on the subject was postponed until after the reading of the President's Address, in anticipation of some suggestions on the subject contained therein.

The afternoon was most delightfully spent in a carriage-drive to points of interest in and around the city, by invitation of the resident pharmacists.

The next session was held at 8:30 P. M., the First Vice-President (Mr. Blair) in the chair. The President read his annual address, which was quite lengthy but well prepared. Among its salient points were certain recommendations with reference to securing the early passage of the "pharmacy bill" by the next Legislature. Reference was made to the repeal of the stamp tax on proprietary articles, and the prospective repeal of the tax on alcohol, so necessary in the preparation of the great majority of medicinal remedies, and the Association was congratulated on the fact that a bill was now before Congress having this end in view. The address recommended that in case it was determined by the Association to adopt a code of ethics, that the code of the American Pharmaceutical Association be adopted. It was also suggested that local pharmaceutical associations be established throughout the State. On the subject of apprenticeship, the President urged the importance of employing none but young men of intelligence and fair education, and those who shall at least have a primary knowledge of the Latin language, and sufficient acumen to acquire a clear understanding of the natural and physical sciences. The address reviewed the high standard of education required of pharmacists in various parts of Europe, notably in Germany, where a course of nine years' study is required previous to occupying the position of proprietor of a pharmacy. The address was referred to a committee, to consider and report on the various suggestions contained in it.

Letters were read by the Corresponding Secretary from Professor John Attfield, of London, England; Professor J. M. Maisch, of the Philadelphia College of Pharmacy; Pro-

fessor J. W. Mallett, of the University of Virginia; and Professor P. W. Bedford, of the New York College of Pharmacy, accepting honorary memberships in the Association.

Mr. W. A. Strother, of Lynchburg, read a very interesting paper on the preparation of chemicals in the South during the late war, entitled "Pharmacy under Difficulties." Among other things, he had to prepare Epsom salts with crude and improvised apparatus, which he sold for ten dollars a pound.

Mr. Sayre, delegate from the Pennsylvania State Association, congratulated the Association on this paper, and heartily endorsed the moral of the paper in relying on themselves, and educating themselves by the study of chemistry, so that they would be enabled to prepare articles not readily obtainable.

Mr. Thomas, chairman of the Committee on Papers and Queries, read a paper by Mr. Brydon, of Danville, who could not attend, on "The Medicinal Indigenous Plants of Virginia," and also a paper, by Mr. E. P. Reeve, of Richmond, on "Emulsions."

The fourth session was opened at 10 A. M. Thursday—the President, Mr. Santos, in the chair. To save time the reading of the minutes was dispensed with, and the reading of papers continued.

Mr. J. W. Thomas, Jr., of Norfolk, read his paper in reply to the query, "What are the Most Prominent Uses of Glycerine in Pharmacy—What are its Advantages, and How and When are these best utilized in Pharmaceutical Preparations?" Mr. Sayre, of the Pennsylvania Association, opened the discussion on this paper, and gave some interesting incidents in relation to some of his experiments with glycerine and its compounds. He gave his experience in making boroglyceride, which, he said, was not a chemical compound, but merely a mechanical mixture, possessing no stability; and this was proved by the fact that when presented in the form of solution it at once decomposed into two solutions—one of boracic acid and the other of glycerine, each ingredient returning to its original form.

The next paper read was by T. Roberts Baker, of Richmond, on "Gums—their Origin, as well as their Physical, Chemical, and Therapeutical Characteristics, and their Uses in Pharmacy." [We understand that in this paper Mr. Baker treated the whole subject of gums exhaustively—first describing the source and origin of the various kinds of gums known to science, giving the botanical classification,

physical peculiarities, and chemical constitution of the different varieties; showing the difference between the true gums and the so-called, and gums as distinguished from resins; then noting the therapeutic value of the various species, and concluding by a description of the gum mezquite, the product of a tree which abounds in immense forests in New Mexico, covering hundreds of miles of territory, and which it has been shown, by chemical experiment and practical application, can take the place of gum arabic, should the foreign supply be cut off at any time, either by war or non-production.]

The hour having arrived for the election of officers for the ensuing year, nominations and balloting were commenced, resulting in the election of the following gentlemen:

President.—Mr. W. A. Strother, Lynchburg.

First Vice-President.—Mr. R. H. Stratton, Gordonsville.

Second Vice-President.—Dr. E. A. Craighill, Lynchburg.

Third Vice-President.—Mr. W. D. Hudson, Alexandria.

Fourth Vice-President.—Mr. B. H. Gorrell, Lexington.

Secretary.—Mr. E. R. Beckwith, Petersburg.

Treasurer.—Mr. F. H. Masi, Norfolk.

Corresponding Secretary.—Mr. T. Roberts Baker, Richmond.

The pharmacy bill was then called up, and after some discussion upon a proposition to amend, it was decided not to change it. At this point replies to telegrams were received from the Kentucky and Mississippi State Associations, returning greetings.

The following members were elected, whose names will be presented to the Governor, from which he will select five to constitute a board of pharmacy, in accordance with the provisions of the pharmacy bill, in case it shall pass the Legislature and become a law: Hugh Blair and T. Roberts Baker, Richmond; E. R. Beckwith, Petersburg; C. B. Fleet, Lynchburg; J. W. Thomas, Jr., Norfolk; Robert Brydon, Danville; B. H. Gorrell, Lexington; Anton L. Billisoly, Portsmouth; Edgar Warfield, Alexandria; C. P. Benson, Charlottesville.

Delegates were elected to attend the next annual meetings of the American Pharmaceutical Association, the Maryland Pharmaceutical Association, the West Virginia Association, and the National Retail Druggists Association.

Mr. Hugh Blair, chairman of the Committee on Sunday Observance, presented the report of the committee. The report protested against the sale on Sunday of any articles

except those which would be necessary to save life or health, and recommended, as far as possible, a general observance of the Sabbath day.

After passing the usual resolutions of thanks, the Association adjourned to meet in Charlottesville on the third Tuesday in May, 1885.

The exhibition of drugs, chemicals, surgical instruments, perfumery, &c., held in the same building in which the Association was convened, was very attractive.

AMERICAN MEDICAL ASSOCIATION.

SECTION ON OBSTETRICS AND DISEASES OF WOMEN.—*First Day, May 6th.*—Dr. T. A. Reamy, Cincinnati, chairman.

Desperate Surgery Among Women was the title of a paper by Dr. R. S. Sutton, of Pennsylvania. Desperate surgery, he said, means operations endangering life, and in women it is chiefly intra abdominal. The proper place for these operations is not in the general hospital with its pus-soaked walls, or the modern dwelling with its defective sewerage, or the roadside cottage with its health-bringing air; there cannot be found the indispensable nurse, and the surgeon may be a league away. These conditions render such a locality unavailable. The material elements of safety are: Large airy apartments, no zymotic germs, sun and air space, perfect sewerage, quiet city neighborhood, a conscientious nurse, but necessarily a trained one, and the surgeon near his patient. All of these conditions are secured in a private hospital, and with them we can equal the success of Keith or Tait, by whom they are practiced. The general practitioner who is exposed to the poisons of scarlatina, diphtheria and erysipelas, is not warranted in assuming the responsibility of these operations, and by so doing destroys life and makes himself liable to criminal prosecution. The obstetrician encountering puerperal peritonitis and other zymotic diseases has no right to imperil a woman's life. The gynæcologist may be the minister of death while attending a case of uterine cancer. The clothing of the practitioner from exposure to infective diseases may be the deadly agent. The history of the past and the judgment of the present decide the operator to be a specialist, and exclude him from general practice. For successful abdominal surgery, the absence of all zymotic disease poison and the presence of perfect cleanliness and good nurses are essential.

Dr. Engelmann, of St. Louis, spoke of the importance and difficulty of blending theory and practice. He thought that Dr. Sutton's views are theoretically true. The late Dr. Hodgen, an acknowledged able surgeon, lost most of his ovariectomies. He attributed it to his having at the same time practiced general surgery and medicine. He thought that the chief law of success, "absolute cleanliness," was necessary, and that it was best carried out in a private hospital. He had seen an influx of sepsis, apparently from the presence of a single gentleman at an operation, conveyed to the patients that had been and were operated on in a hospital where the most severe abdominal operations had resulted previously in but a slight or no rise of temperature. Dr. Engelmann insisted on the greater value of a "cleansed" than of a trained nurse. The specialist endangers the success of his operations when he must take the general practitioner as his assistant. If the specialist can achieve absolute cleanliness, he must do it. Even in the English hospitals there remains much to be improved. The private hospital of Dr. Martin is by no means a model one, and he thought his success had been due entirely to skill and cleanliness. Dr. Martin's new hospital is to have a room for major and one for minor operations, and will be so constructed as to be easily flooded, when necessary, with a proper disinfectant.

Dr. Dunlap referred to his experience of over forty years, and said that, theoretically, the statements contained in the paper are true. One of the main factors of success had been, however, omitted. This is the condition of the patient's mind when removed from her home and left in a hospital. He insisted on the importance of the woman's conviction of recovery after the operation, and did not think the practitioner a walking magazine of death and destruction; yet he is careful of cleanliness, and values the purifying influence of the air in removing the poisons of infectious diseases that may have penetrated the clothing. During 1881-82, almost every one of his ovariectomies died. He lost three cases in succession. Since March, 1883, he has operated twenty-two times, with but two deaths. One of these was in a woman of seventy years; the other, sixty-four and broken down. He is particular to thoroughly cleanse the wound, and treat his hands and instruments in the same manner. He favors the semi-reclining posture for the patient, which is of great importance for drainage. He does not favor the use of carbolic acid in the abdominal cavity, because it prevents the

natural absorption of poured-out fluids, and at the same time it often interferes with healthy kidney action.

In answer to a question as to the cause of the severe mortality mentioned, he said that he thought it due to atmospheric influences passing over areas of country. His other operations in general surgery had been also unfavorable at that time.

Dr. Quimby, of Jersey City, referred to the two extremes of treatment and precaution advised in this operation. He takes a middle ground. Believing want of cleanliness one of the greatest dangers, he does not consent to set these operations apart as the work of special persons. During an epidemic of small-pox he had attended cases of confinement with the only precaution of changing the clothing and attending his obstetric patients last. Cleanliness of hands and hair was also practiced, and he failed to observe any disastrous results.

In reply to an inquiry of Dr. Sutton, he said that he had opened the abdominal cavity six or seven times, with a mortality of three.

Dr. Sutton said that the statement of the low foreign mortality and its causes had not been refuted. His own first seven cases were fatal. After having observed the practice abroad for eighteen months, and having again had four failures in succession, he perceived his error and opened a private hospital. His seven ovariectomies therein performed have all been successful, and his highest temperature rise has been 101.5° F.

Effects of Trachelorrhaphy.—Dr. J. Tabor Johnson, of Washington, wished to draw attention to the immediate and the remote effects of the operation. In some cases the operation is unwisely or unskillfully done, or oftener than is needed. Emmet now does one operation where formerly he would have done ten. This is because he first attempts the cure of endometritis or endocervicitis. In having the unfortunate result of a complete stenosis of the cervix, the fault is with the operator, not the operation. The frequency of laceration is not increased. When the operation is indicated and well performed it is one of the greatest operations of the age.

Dr. Garcelon, of Maine, indorsed several of the author's points. The operation has no effect on pregnancy and conduces to fertility. There are two important reasons for performing the operation: (1) It reduces uterine hyperplasia; he operates in all cases of increased growth whether a lacer-

ration exists or not. (2) The scissors must be very sharp; one cut for each side suffices. (3) The parts must be absolutely approximated.

Dr. Woodward, of Vermont, avoids pelvic cellulitis by digital examination; if on any part of the vaginal surface tenderness is produced, he does not draw the neck toward the vulva, as is usually done, but operates with it *in situ*.

Dr. Reamy said we ought to operate in all perceptible lacerations, and do so without awaiting the appearance of symptoms. Epithelioma is seen in its frequency and analogous causation on the lower lip of men. He was of the opinion that Emmet is forsaking his most brilliant operation.

Dr. W. H. Byford read a paper entitled *Surgical Operations for Cancer of the Uterus*.

SECOND DAY.—*May 7th*.—Dr. Theophilus Parvin read a paper on *Puerperal Septicæmia*, urging cleanliness and judicious antisepsis as preventive of puerperal fevers.

Relations of Ovulation and Menstruation was the title of a paper by Dr. A. Reeves Jackson.

Management of Protracted Labor was the title of Dr. W. H. Taylor's paper.

Dr. J. Herbert Claiborne, of Petersburg, Va., read a paper on the *Use of Chloroform in Labor*.

THIRD DAY.—*May 8th*.—Dr. I. E. Taylor read a paper on the *Management and Rectification in Difficult Cases of Occipito-Posterior Presentations*. Rotation, in such cases, is brought about naturally by a rotating action of the uterus. How this took place has never been satisfactorily explained. When artificial aid is required, the hands or the lever must be used. The temporary use of the forceps may be of value.

Causes and Prevention of Laceration of the Female Sexual Organs.—This paper was written by the late Dr. Samuel D. Gross, but was read by Dr. S. C. Busey. Dr. Gross in explaining his interest in the subject, stated that he practised obstetrics specially during the early part of his life, and had translated and studied obstetrical works. Gynecologists were very ready to invent operations for lacerated parts, but rarely sought any way to prevent these accidents. Dr. Emmet had said that nearly every primipara suffered some laceration of the cervix. If this were so, then God ought to have made a gynecologist as a supplement to his creation of woman. Dr. Gross discussed the subject of the causes of lacerations. He spoke in the severest terms against

the too frequent and maladroitness use of the forceps. He urged very strongly the employment of venesection in order to relax the parts.

Dr. Robert Battey, of Rome, Ga., wished to put himself on record in confirmation, in part, of the views expressed. The summing up of Dr. Battey's obstetrical experience has been that in not a single instance has he had reason to regret the use of the lancet. In many instances which he can recall, positive good would have grown out of the more frequent use of it. He uses it still when he has occasion to do obstetrical work.

Dr. H. F. Campbell, of Augusta, Ga., said the principles the paper enunciates will, perhaps, not meet with the commendation of many, no matter how much we venerate the illustrious man who honored this Section with his last production. Blood-letting in labor, especially under certain circumstances, has been most unjustly laid aside. See what has been given us in the place of blood-letting. Chloroform, chloral, bromide of potassium, and a variety of other remedies. The cause of convulsions is variously estimated. One will say that the cause is uræmia, another will say anæmia. If anæmia of the brain is the cause of puerperal convulsions, why give those very remedies that produce exsanguination of the brain? In that case why give chloroform, bromide of potassium, or any other remedy that exsanguinates the brain? On the other hand, as to uræmia. Why does urea collect in the blood? Because of the congestion of the kidneys. If congested kidneys arrest the flow of urea and retain it in the blood, which thus results in convulsions, exsanguinate the kidneys, bring the kidneys down to a healthy point, eliminate the urea, that the blood may be free from it. At one time it was claimed that convulsions arose from an irritation of the brain, now it is claimed that they result from anæmia of the brain. He took two birds and cut all the tissues that were in front of the cervical portion of the column. The birds bled, fell, and died without a kick. If anæmia of the brain could produce convulsions, certainly they must have resulted in this case. The birds were ordinary barn-door fowls.

Dr. Harvey, of Indiana, said we are certainly not going to turn back in this stage of the world and begin to again bleed our patients, while admitting the necessity for the use of the lancet occasionally, in certain well-selected cases. He entered the profession in the days of blood-letting and followed the teachings of Dewees and White. He has seen good im-

mediate results in labor from the use of the lancet, yet he has seen better results from the use of chloroform and opium, both in convulsions and in relaxation and prevention of laceration, and the accidents spoken of in the paper. Although venesection occasionally acts in a beneficial way, it certainly does harm to the patient in the long run.

Dr. Kinloch, of South Carolina, disagrees entirely with the sentiments expressed in the paper as to the surgical use of blood-letting. He has practised medicine for thirty-five years as a general practitioner, and has had a fair share of obstetrical practice, and has never yet bled a woman in labor, and has never lost but two women from diseases consequent upon or connected with the parturient state.

He wonders if our illustrious deceased friend, if he were here, would apply the same rule to surgery that he would to obstetrics. If the rule is not applicable to surgery it is not applicable to gynecology and obstetrics. If it is not necessary to bleed a man to cause a relaxation of the shoulder or of the femur, it is not necessary to bleed a woman to relax the sphincter muscles. It is *post hoc* and not *propter hoc*. Many of us have seen the sphincter muscles relaxed by giving the patient chloroform or opium and waiting for a few minutes, half an hour, or more. If the same patient had been bled, it would have been affirmed that blood-letting had relieved her.

Dr. Seymour, of New York, thought there must be differences in diseases in the localities in which the speakers practise. Certainly it is in the experience of the older men in the section in which he lives men who used to operate with the lancet years ago, that the disease at the present time cannot stand it. The Vienna school has shown that these cases can be successfully treated without bleeding. He knows of no school where they have so many puerperal women as they have there, or where anything like their statistics can be shown. Neither bleeding nor forced accouchement are necessary for that purpose.

Dr. Smith, of Washington; "An old friend sitting by my side remarked a little while ago, 'Dr. Gross' paper takes rank with Washington's farewell address.' I make this statement to show you that the old doctors still believe in bleeding, although the young ones do not believe in it quite so much."

Dr. Claiborne, of Petersburg, Va., thinks that the truth lies as it ordinarily lies, in the middle. There are some patients who should be bled, and some who should not. While an advocate of chloroform, yet he should be very

sorry to throw the lancet utterly away. He is neither an old man nor a young man; he is in the middle, and therefore claims to be nearer the truth than either. He has been engaged in practice about thirty-two years, and most of the time in obstetrical practice.

Dr. Reamy, of Ohio, said: Summing up in this paper, the distinguished author states that he would bleed in threatened abortion. No distinction is drawn here as to what kind of a threat, as to what the causes leading to the threatened abortion might be; simply if the woman was threatened with an abortion he would bleed her. Granting that blood-letting would do no possible harm ultimately, granting everything for it that is claimed, it is a proposition which need not be contradicted—it contradicts itself. He would also bleed in case of fever. If a pregnant woman had fever he would bleed her. He does not even make the distinction that the judicious obstetrician or general practitioner in charge of that woman may recognize the fever from which she suffers as the result of poison in her system before she is delivered. Why would he bleed such a woman as this? Why would he lessen her vital power and take from her the blood which physiologically as well as scripturally is her life, in order that she may be the better prepared to fight with the poisonous germs in her system and resist their progress? Why bleed her to-day, in order that to-morrow, or next day, with these germs in her system, she may enter upon the throes of labor minus the amount of life the lancet has taken from her—bleed her simply because she has a fever? Rather husband every particle of strength that she has, knowing that it will be required to resist the influences with which she has to contend. He would bleed in a case of rigid os, he would bleed in a case of nagging fever. An obstetrician in modern times, who has not been taught that the lancet is the grand remedy for all the ills that the parturient woman can enter upon, under circumstances of this kind, if she had nagging pains, would give her chloroform or something similar, let her go to sleep for three or four hours, and then return and deliver her in a short time; or, if her pulse was too high, give her a sedative. He would bleed in every case of puerperal convulsions, perhaps. While all cases are not alike, and while there is no one who would not bleed in some cases, yet he is very far from agreeing with the views expressed in this paper. In a certain proportion of these cases bleeding is perhaps the best remedy. At the same time it includes but few of the cases in which any man who has used

the hypodermic injection of morphine, and has seen a woman go into a tranquil sleep who was a few moments before in peril from convulsions, would wish for other treatment.

Forceps are not now what they were; but Dr. Gross states that teachers of obstetrics have a fearful responsibility for sending out obstetricians incompetent to use the forceps indiscriminately, and who do with those instruments so much damage. Without doubt the use of this instrument simply for the purpose of saving time is wrong. It is criminal to use the forceps so as to get to a good supper. The students who go forth now and are taught in this department are more competent to use this instrument after two years' practice, are better instructed in its use, and more thoroughly comprehend the principles, than the average practitioner of twenty years in the old days. The obstetrical forceps is not the weapon of ruin that it is pictured here in this admirable paper. I must, therefore, enter upon my protest against this particular part of the paper.

Dr. Wathen, of Kentucky: If the brain is in an anæmic condition, certainly such remedies as chloral and chloroform would be far less injurious than blood-letting; in this case the brain would be depleted more by blood-letting than by the chloroform. He has never seen a case where the patient suffered with fever or with threatened abortion where he could possibly conceive that blood-letting would be of benefit. Blood-letting is of benefit in puerperal fever, where there is an excessive volume of blood, though there may be a depreciation of its quality, at the beginning of the convulsions, before other remedies could possibly act. The amount of blood that is taken away may prevent injury to the brain that would prove fatal. That would only be a means to prevent the injury until other means could act. In regard to the remark in Dr. Gross' paper, that the abstraction of blood left the system in a better condition for the puerperal woman, that is certainly not in keeping with the view of other practitioners. With the blood of a poorer quality than it is at other times, physiologically, and with a woman who, after she is confined, is constantly losing blood for a week or two, or three weeks; a woman that wants everything that she can possibly get to enable her to go through with the puerperal condition properly; a woman who cannot take a very great quantity of good nourishing food for making blood; a woman who is to go through the process of involution; a woman who must furnish milk to the child—to say that this woman is in a better condition after having been bled pro-

fusely, as suggested, than one who has not been bled, is absurd.

Sudden Death in Labor and Childbed.—Dr. Wm. T. Lusk, of New York, reported an illustrative case. He then discussed the possible causes: First, the entrance of air into the uterine veins. The aspiration force of the vagina is greatest in the knee-chest, latero-prone, and lithotomy positions. The use of the vaginal douche is not free from danger, and its use had been forbidden in the public institutions under his charge. A second cause is that of thrombosis and embolism. Ordinarily, however, death from these causes is not instantaneous. Dr. Lusk doubted if suddenly formed cardiac thrombi ever occurred—at any rate, such a cause of death was not positively demonstrated. In some cases, like that reported by the author, there is no entrance of air, or embolism. Dr. Lusk was inclined to attribute the cause in these cases to shock. He thought that the pathology in childbed cases was just the same as that elsewhere.

Dr. Brown, of Baltimore, read a paper entitled *Malformations of the Female Sexual Organs*. In one case the uterus and ovaries were absent, and the vagina was present. In a second case there was an infantile uterus, with amenorrhœa. The condition was relieved by faradization. Cases of ante-flexion as the result of defective development were related.

SECTION IN DISEASES OF CHILDREN.—*First Day—Tuesday, May 6th.*—Dr. Wm. Lee, of Baltimore, Chairman; Dr. Geo. N. Acker, Secretary.

Significance of Bloody Discharges from the Bowels In Children, by Dr. Frank Woodbury, of Philadelphia. The occurrence of blood in the alvine dejections of a young child is a symptom that excites alarm. Systematic writers on diseases of children speak of it only incidentally. Like hæmatemesis, bleeding from the intestines is merely symptomatic. The term *melæna* was anciently used to indicate black discharges from the stomach or bowels, or both. This may be due to medicinal substances, as bismuth, as well as to the action of the intestinal fluids upon effused blood. Blood may appear in the discharges from a lesion in the stomach, œsophagus, or upper air-passages, or even from without the body, being taken with the food, as a baby from nursing a bleeding nipple. The present consideration of the subject will be limited to bleeding from sources below the pylorus. The first question asked is as to the site of the hemorrhage; the second is, what is its cause? Vascular piles were found by Allingham

to be a cause in a boy three years old, who had bloody discharges from the rectum. Sedgwick calls attention to the existence of piles at an early age. Fissure of the rectum is given as a cause of a bloody discharge in a boy four and a half years of age. Prolapse of the rectum is less frequently accompanied by hemorrhage in children than adults. The descent of the bowel is a secondary condition caused by weakness of the sphincter from prolonged diarrhœa. Polypus of the rectum is more frequent in children than is generally supposed, and is usually accompanied by bleeding. Bryant says that in children this is the principal cause of hemorrhage from the rectum. These polypi may be mistaken for hemorrhoids, but the treatment is much the same. It is rarely necessary to apply the ligature in children. The usual site of the polypi is inside the internal sphincter, from two to six inches within the bowel. The pedicles may be several inches in length. Foreign bodies may cause ulceration and hemorrhage, such as pieces of bone, glass, etc., swallowed by the children; or substances may be introduced from without. Dysentery and entero-colitis, if of sufficient severity, will cause small quantities of blood to appear during the height of the inflammation. If ulcerations have occurred, large quantities will appear. Masses of worms may cause enough irritation to produce some bleeding. Intussusception of the bowel is accompanied by the passage of blood. Ulceration of the small intestines may be due to sloughing of necrosed follicles in simple catarrhal inflammation, or it may be tubercular in origin. Such a hemorrhage may simulate that from typhoid fever. Some of the causes of the hemorrhage are less localized. Thus congestion of the mucous membrane is quite common in young infants with inflammation. This congestion may be secondary to diseases of the other viscera, as the spleen or liver. In some cases of bleeding the pathological condition is not well understood. In some cases purpura hemorrhagica is a cause of the bleeding. Blood sometimes appears in the discharges during the specific fevers. The doctor met a case last year in which a boy, eight years of age, during an attack of acute articular rheumatism, was seized with obstinate constipation and a discharge of blood from the bowel.

Dr. J. Lewis Smith stated that in this affection the pathological conditions were very different. Intussusception was a most important cause of a bloody discharge, unmixed with mucus, and it is vitally important that an early diagnosis be made. It occurs chiefly at the ileocæcal valve, causing the

most intense passive congestion with oozing of blood. The intussusception may be in the large intestine alone. There is a little fecal matter passed, followed by dark-red blood. Tenesmus generally exists, which resembles dysentery, but no mucus is usually present. Purpura hemorrhagica is the next common cause, and the changes are apparently in the capillary walls and not in the blood, as well-nourished children are often affected. He had never seen hemorrhage from worms.

Dr. Fay had frequently seen blood in gastro-intestinal catarrh.

Dr. Adams thought that sufficient attention had not been given to the symptoms following the cessation of the hemorrhage; stimulants should then be freely given.

Dr. Woodbury thought a digital examination should always be made.

Congenital Encephalocele, by Dr. John H. Duncan, of Kansas City. This affection is comparatively infrequent. He recently had a gratifying result in the treatment of a case. There are two varieties: 1, congenital; 2, traumatic. The former only was considered by the writer. The real cause is in the cranial cavity; the integument is usually perfect. The tumor usually occurs in the occipital region, or at the anterior fontanelle. Pressure on it causes cerebral symptoms. At present the tendency in treatment is to leave them to nature, while the older surgeons used the knife or ligature. The author prefers leaving the tumor alone if possible, if not, to use the ligature. A case was then cited: Willis M——, born August, 1883, was brought to the doctor at the age of seven weeks. He had a tumor about three-fourths of an inch in diameter, situated at the anterior fontanelle, which was covered by skin, and pulsated synchronously with the heart. He was born after a very tedious labor, lasting twenty-four hours. His mother then noticed a very small swelling, which slowly enlarged. It continued very slowly to enlarge, until in December it rapidly increased in size, in two days attaining the size of an orange. Brain-tissue was now plainly to be detected in the tumor. The doctor attributed the sudden increase of the tumor to severe fits of crying, caused by the absence of the mother from her child. There was much nausea present. The tumor was ligated, and almost immediately the nausea ceased. It was necessary to apply several ligatures, but the case was finally cured.

Dr. J. Lewis Smith asked if the internal part of the tumor had been examined.

Dr. Duncan replied that brain-tissue had been found in it. Dr. J. Lewis Smith could not recall any case successfully treated.

Dr. Woodbury thought the case interesting from its resemblance to a malignant growth.

Dr. Duncan at the start was in doubt as to the diagnosis, but later on its extremely rapid growth had made its nature clear to him.

Dr. Latimer found it difficult to realize how so much cerebral matter could be removed without nervous symptoms, and suggested that most of the tumor may have consisted of blood with only a little brain tissue superadded.

Dr. Duncan replied that cases had been recorded in which much brain-tissue had been lost without marked symptoms.

Diphtheria Based upon Analysis of 120 Cases, with a Mortality of Seven.—Dr. J. W. Brown, of New York, did not wish to discuss the symptoms, diagnosis, etc., of diphtheria, but how to lower the mortality. His cases extended over a period of fourteen months, and occurred in a country of wells and old-fashioned back-houses. The invasion was generally sudden, and in a few hours the fauces would be covered by a membrane. It was quite contagious and the doctor contracted it twice. In the seven fatal cases, three died from the disease and four from complications. The average age was under sixteen years. The doctor regarded the disease as constitutional with a local lesion. The latter part must not be overlooked in treatment. He began treating his cases with calomel, five grains every three hours until the bowels freely moved. Salt pork was applied externally to the neck. He did not swab the throat but gently touched it with a solution of the persulphate of iron, 5j., to 5ss. of vinegar and glycerine. He never forcibly tore off the membrane. In the atomizer he used persulphate of iron, gr. x., to 5ss. of vinegar and glycerine. The spray should be thoroughly used. As a constitutional remedy he used a mixture containing tinct. ferri mur. and potas. chlorat. He also gave quin. sulph. and potas. chlorat., of each gr. iij. every four hours. Do not allow the patients to swallow the membrane, as it produces symptoms resembling arsenic poisoning. Give stimulants from the first and let in plenty of fresh air. He frequently purified the air by burning sulphur. He did not believe in tracheotomy or lime-water. The cases had not been selected.

Dr. Samuel Smith said that follicular tonsillitis and pharyngitis often resembled diphtheria. He formerly believed the

disease to be primarily constitutional, but after noticing very many cases in which vigorous local treatment conducted from the first seemed to check the advance of the disease, he had changed his mind. He gave no quinine, stimulants, nor beef-tea, but milk diet, tinct. ferri chlorid., and thorough local treatment.

Dr. A. Behrend noticed that when diphtheria began with hoarseness, nearly all the patients died.

Dr. Franklin had seen many cases in Ohio, and used iron and quinine with gargles. He thought there was an element of rheumatism in many cases of diphtheria, and guaiacum was here indicated. He does not lose five per cent. of his cases under this treatment.

Dr. J. Lewis Smith regarded the disease as primarily constitutional, or at any rate it became so almost immediately.

Dr. Busey, of Washington, recognized three forms of diphtheria, the simple, the more severe, but in which treatment is availing, and the malignant.

SECOND DAY—*May 7th.*—It was moved and carried to continue yesterday's discussion on *diphtheria*.

Dr. J. Lewis Smith uses alcohol in large doses without any symptoms of intoxication. Although he uses iron and quinine he regards alcohol as the most important. He regards with distrust the so-called antiseptic method that uses germicides. The micrococci are as tenacious of life as the white blood-corpuscles. Some leading New York physicians are now looking with favor on the bichloride of mercury in small doses. Dr. Smith regards with suspicion statistics on diphtheria, as, like scarlatina, the type varies so much in different localities and years, although, considering the disease as constitutional, local treatment is very important to prevent septic absorption. When the nasal cavity is affected he uses a solution of ordinary salt and boric acid, a teaspoonful being injected every two hours.

Dr. Burroughs feared that injections might cause otitis media. He uses sulphur by insufflation with good results.

Dr. Free, of Pennsylvania, has had two cases in which children with diphtheria got up fatal nephritis, caused probably by the continued use of large quantities of chlorate of potash. In his district physicians did well if they saved eighty per cent. of their cases. He uses alcohol in large doses from the first, and insists on cleanliness being strictly observed. He uses a solution of lime-water and carbolic acid freely applied to the nose and throat by the hand atom-

izer. He omits quinine, as it disturbs the stomach, and he does not consider it a very powerful disinfectant. In his county there never has been a recovery from laryngeal diphtheria, and one peculiarity about the attacks of diphtheria is that in nearly all cases they are followed by paralysis. He gives rye whiskey, ℥ss. to ℥j. , every two hours as long as the symptoms demand these large doses.

Dr. Hicks, of Virginia, looked upon laryngeal diphtheria as almost necessarily fatal. He had never seen but one case recover. He could not see how a catarrhal inflammation could ever degenerate into a diphtheritic. He had never derived any particular benefit from the chlorate of potash and iron combination. He regarded chlorate of potash as objectionable from its action on the kidneys. In laryngeal diphtheria we can do nothing, and simple cases often get well if left to themselves. The important question to find out is, how the disease would behave if left to run its own course. Physicians practising in hospitals had better opportunities to test this question than country practitioners. Pneumonia was formerly treated most vigorously and not left much to itself; now the mortality is less without so much medication. His plan of treatment consisted of much nourishment and the use of antiseptics. He found a weak solution of the hydrate of chloral to be a good antiseptic gargle.

Dr. Holton, of Vermont, firmly believed in the contagiousness of diphtheria. A country physician can often follow out the contagiousness of a disease better than one practising in the city. He formerly believed the disease to be constitutional, but he now regards it as local, and hence he would emphasize the importance of local treatment. In a former epidemic in his county, among 113 cases there were 13 deaths, and of the latter, 2 were untreated, through the prejudice of parents, and 9 were under the care of homœopathic physicians; he therefore believed that good treatment was of great avail in this disease. He does not give quinine, on account of stomach irritation, but uses stimulants. A chlorine mixture is likewise employed.

Dr. Hicks thought there were circumstances in which diphtheria was contagious and others in which it was not. There must be favorable conditions for its development.

Dr. Park, of Pennsylvania, practised in the coal regions, where he has lately had a number of cases of diphtheria. He considered the disease more local than constitutional. He had not seen many cases die except from laryngitis. He used a gargle of crystallized carbolic acid, tannic acid, and

glycerine, and did not regard the disease as very contagious.

Dr. William Lee regarded the statistics presented in Dr. Brown's paper as marvellous and questioned the correctness of his diagnoses. There is no disease so difficult to diagnose as diphtheria. He quoted Henoch as saying that he never made a positive diagnosis on his first visit. Catarrhal angina often simulates diphtheria. If the membrane can be removed without bleeding it is not diphtheria. In all the cases he has seen the membrane extended up back of the uvula. He believes the disease to be general from poisoning by micrococci. He gives alcohol freely and resorcin internally, and locally a powder of resorcin and sulphur, which can be placed upon the child's tongue, and is readily swallowed. He regards mopping the throat in young children as highly dangerous, and likewise efforts to detach the membrane. He always considers diphtheria as contagious, and most cases he has treated began as a simple catarrhal angina.

Dr. Busey thought the diphtheritic poison was very apt to be ingrafted upon a simple catarrhal inflammation.

Dr. S. Smith cited two cases that seemed to him to prove that diphtheria is primarily local. If he could not wash off the membrane without pain, it was probably diphtheritic. He uses a wash of borate of soda, which destroys bacteria.

Dr. Brown said that the object of his paper was to show the benefit of the persulphate of iron in his cases. He thinks the vinegar assisted in dissolving the membrane, but the good hygienic surroundings of the country may have assisted him in obtaining such good results. The temperature curve was valueless as a diagnostic point in his cases. He had no experience with the bichloride of mercury.

Septic Jaundice in Childhood.—Dr. M. P. Hatfield said this affection is very rare. The liver acts as a general depurating agent of the body, and hence its functions are very important. If this organ acted well we might not have malarial trouble, septicæmia, etc. Jaundice is sometimes considered hæmatogenous, but the writer thought this was not common, and particularly that it did not occur in infants. A case was here cited. Willie M——, aged four years, was taken suddenly with vomiting and a high fever; temperature 104°. Soon the rash of scarlatina developed. The disease was complicated by entero-colitis, which was relieved by treatment. The throat was extremely inflamed, exhaling a very offensive odor. On the next day, the third of the disease, the temperature went up and jaundice appeared. The fever reached 105°. The child was weak and very drowsy. On

the seventh day the jaundice was intense, all the secretions being stained, even the ear-wax and nasal mucus. The child was speechless and the discharges passed involuntarily. The acid pack was used. Although the child was very low he slowly recovered, and in one month the boy was discharged cured. No authors mention jaundice as a complication of scarlatina. The writer considers the jaundice in this case as due to septic influences. He can find nothing in literature resembling this case.

Dr. William Lee stated that he has had three cases of septic jaundice in children, all of whom died within a week of birth, and their mothers were all in delicate health.

Dr. Hatfield asked if there was umbilical inflammation in Dr. Lee's cases. Dr. Lee replied that none had been detected.

THIRD DAY—*May 8th.*—*The Feeding of School Children*, by Dr. Louis Atlee, was in his absence read by Dr. Woodbury.

Enlarged Tonsils, and How they Should be Treated.—Dr. Dudley S. Reynolds, of Kentucky, said enlarged tonsils nearly always coexist with chronic thickening of the nose and pharynx. The tonsils are lymphatic glands, and their enlargement has the same significance as that occurring in other lymphatic glands of the body. There is nothing to show that enlarged tonsils are due to inherited struma. In 9,012 persons he had examined with naso-pharyngeal trouble, 8,062 had enlarged tonsils, and in 8,654 of the cases the patients lived largely on food containing artificially produced glucose that does not nourish well. In his region maple sugar and syrup were largely taken, and he found them to aggravate any engorgement of the lymphatic tracts. If oils, fats, and animal food were taken more by children, instead of so much sweets and cooked fruits, which depreciate the system, enlarged tonsils would not be so frequent. Starvation is found to produce lymphatic engorgement. Many disasters, as impairment of voice, etc., follow cutting. Local treatment alone never can cure, but a combination of local and constitutional measures gives relief. Often it is only possible to produce an amelioration of symptoms. Frequent bathing, milk and animal food, and plenty of out-door exercise were recommended.

Dr. Chancellor, of Virginia, had seen a decided hereditary tendency to enlargement of tonsils. He did not believe in instrumental interference. Treatment should be constitutional.

Dr. Reed, of Ohio, thought that general treatment was not sufficient to overcome enlargement, which predisposes to other throat diseases. Cutting might save years of trouble. Diphtheria tends to attack enlarged tonsils.

Dr. Daly, of Pennsylvania, said the best treatment was abscission of the tonsils. He can give assurance of relief if this operation is properly done. We must make as good a stump of a tonsil as we would of an arm or leg. If there is any ragged tissue, trim it off, and if granulations afterward appear they must be snipped off. In two or three months after thus operating an expert cannot generally tell that an hypertrophy has existed. He never uses chloroform or ether.

Dr. Jewett, of New York, does not remove tonsils now so frequently as formerly. He only removes them when exceedingly large, as he has noticed that in girls at sixteen years and men at twenty-five years they generally grow smaller. He has never had success with topical treatment.

Dr. Reynolds said that generally there was no reasonable ground for tonsillotomy. Enlarged tonsils are not necessarily inflamed. Partial cutting, of course, will not produce the same disasters as complete excision.

Incontinence of Urine in Children.—Dr. Samuel S. Adams, of District of Columbia, has examined all the literature of the subject from the year 1784 to the present date. In 1784 Mitchel wrote as clearly on the disease as any subsequent author, and its pathology was as well understood then as now. From birth the child instinctively voids its urine, as the act is reflex. About the eighteenth month the child begins to exercise complete control over the sphincter; after this time incontinence is attributed more to carelessness than to a pathological condition. This he considers a great injustice, particularly as children are often punished. All of his cases have had a specific cause. There are three varieties of incontinence. 1. Where there is a constant dribbling, not frequent. Two such cases were due to vesical calculi. 2. Intermittent incontinence, often met with in girls. They lose control of the sphincter before getting to the closet. 3. Nocturnal incontinence. The same causes that produce seminal emissions in adults bring on this condition in children. Enuresis is often superseded by seminal emissions, and the same remedies often relieve both conditions. It is a conservative process following undue irritation, occurs most frequently between eight and twelve years. Cases were then cited in which the causes were phimosis, calculi, ascarides in the rectum and vagina, hip disease, and amorous dreams. He

does not approve of chloral for children. In exalted nervous conditions the bromides are to be given; belladonna is the best to allay irritability and relax spasm. Circumcision is often necessary.

Dr. Reed mentioned a set of cases in which the incontinence was due to a want of tonicity of the bladder with partial retention of urine. Here strychnine is of benefit.

Practical Suggestions on the Treatment of the Malignant Forms of Scarlet Fever.—Dr. Bedford Brown, of Virginia, said the marked features of malignancy were very high temperature, extensive prostration, defective renal action, a greatly weakened heart, feeble pulse, frequent vomiting, and a total suspension of the digestive functions. Can the type be modified by treatment? His plan of treatment was sedative and eliminative. The action of the skin and kidneys must be freely kept up to eliminate the poison, while the system must be energetically supported.

Analyses, Selections, etc.

Petrification Before Death.—Dr. J. A. Hopkins, of Milton, Del., in the *Proceedings of the Medical Society of Delaware*, 1883, reports a remarkable case, in brief, as follows: On the 1st of January, 1883, I was summoned to the bedside of Mrs. Jeff, a young married woman, in labor with her first child. After six hours she was delivered of a healthy babe. The labor was slow and tedious, but nothing occurred more than is generally found in cases of the kind. Her health during gestation was good. After the third day the milk flow came on; the child nursed freely; the patient had recovered from her exhaustion and soreness incidental to lying in; then she began to complain of headache and want of sleep. These symptoms were remedied by soothing cordials and bromide of potash. Outside of these little troubles, she moved on smoothly for two weeks, when my attention was called to a soreness and pain in the left breast, which I found to be inflammation of one of the milk glands. I poulticed it with bread and milk, alternating with flax-seed poultices. In a few days the abscess broke and healed; then another formed and broke, and another, until there had been five different ones, not one communicating with another. There were night sweats, with hectic fever, loss of appetite and headache. On account of much pain, she could not nurse the breast,

but continued to draw it with a pump. The flow of milk continued in the right breast, and was nursed regularly by the babe. About this time, I began to notice a hardness of the flesh at the wrist, so much so that the pulse could not be felt at that point. A few days after this, I found her with a desperate pain in the hypogastric and epigastric region, saying she had colic. Upon close examination I found the hardness had extended to the body, which was as hard and solid as if there was rigor mortis. I could not dent or discolor it by pinching or pressure; the skin had assumed a gray, glossy appearance all over the body. The pain in the stomach ceased, but with the cessation came a choking sensation extending from the stomach the whole length of the œsophagus, and it was with difficulty that she could swallow the blandest fluids. There was an excessive flow of saliva and gastric fluids, so much so that several napkins were saturated daily. The hardening kept apace until the whole body was in a state of apparent petrification. The scalp and skin on the face and neck grew fast to the muscles and bone, and I could as soon move it as I could the bark on a tree. The muscular system took on the same condition. They seemed to grow fast to each other, and were very much shortened. There was no swelling of any kind, but on the other hand an atrophied condition. The joints became stiff, and, strange to say, without any pain in them or soreness of any kind. In this condition she lived ten days, and up to within a few minutes of her dissolution her mind was as bright as a sunshiny day.

Book Notices, &c.

International Encyclopædia of Surgery. Edited by JOHN ASH-HURST, JR., Professor of Clinical Surgery in the University of Pennsylvania. Illustrated with Chromo-Lithographs and Wood-Cuts. In Six Volumes. Vol. IV. New York: Wm. Wood & Co. 1884. Royal 8vo. Pp. 987—xxiii. Cloth. (For sale by Messrs. West, Johnston & Co., Richmond.)

The "Systematic Treatise on the Theory and Practice of Surgery by Authors of Various Nations" is a treasure in any medical library. This fourth volume of the series concludes the subject of "Injuries and Diseases of Various Tissues, and begins the Surgery of Regions." Prof. Olier, of Lyons, not having completed his article on *Diseases of Bones*, the editor, rather than delay the issue of the present volume, will intro-

duce that article in one of the two volumes yet to be issued. But *Injuries of Bones* forms the subject of the opening chapter, which was prepared by that eminent surgeon of Philadelphia, Dr. John H. Packard. The completeness of this chapter, which considers only fractures, may be surmised when reminded that it covers 260 pages—the subject of punctured and gun-shot wounds having already been discussed at length in Vol. I. An exhaustive chapter on “Diseases of Joints” by Richard Barwell, F. R. C. S., of London, comes next in order, and occupies about 180 pages. It is as remarkable for the amount of research as it is for its practical teaching. We may mention for the benefit of those practitioners who differ in opinion from Dr. Sayre—who think hip-joint disease is “usually traumatic”—Mr. Barwell says: “I can only say that such is not the fact in England, certainly not in London. In some cases the parents refer to a fall or injury, in this as in all other joint-diseases; but such histories are generally hunted up for the sake of finding a cause, and often are imaginary.” Other joint diseases discussed are synovitis in its various forms, including articular rheumatism and gout, dropsy of the joints, movable bodies in joints, joint-disease due to osteitis, syphilis of the joints, sacro-iliac disease, ankylosis, articular neuroses, tumors of joints, etc. Excisions and resections are described by Dr. Ashhurst himself in all their details with the exception of the excision of the knee-joint, which is described by Dr. Geo. E. Fenwick, Professor of Surgery in the McGill Hospital, Montreal. Both of these papers are authoritative in the highest sense. Henry Trentham Butlin, F. R. C. S., of St. Bartholomew’s Hospital, London, contributes a chapter of over 120 pages on Tumors of Bones—benignant and malignant—which is as instructive in diagnostic points as it is valuable in suggestions relating to treatment. The late John A. Liddell, A. M., M. D., late Surgeon to Bellevue Hospital, New York, contributed a remarkably instructive chapter of considerably over 200 pages on “Injuries of the Back, including those of the Spinal Column, Spinal Membranes and Spinal Cord.” Had he been spared, the editor thinks “he would doubtless have taken some notice of the recently published views of Mr. H. W. Page as to the so-called ‘railway injuries of the spine’—views which differ in certain particulars from those which Dr. Liddell has advocated.” This Vol. (IV) concludes with a chapter of some seventy pages by Frederick Treves, F. R. C. S., Assistant Surgeon to the London Hospital, on “Malformations and Diseases of the Spine,”

which is not equal in merit to the preceding chapters. If we had the space, we think we might prove that the author is either too bigoted or has not sufficiently familiarized himself with Sayre's jacket treatment of spondylitis to give that subject a proper review. Still this chapter is one of true worth in many particulars. We mean simply that it is not the equal of others in this volume.

Each of the volumes conclude with quite a good index. We trust the editor will consider the propriety of a "general index" at the end of the last volume of the series, or else issue one in pamphlet form to be distributed when the last volume is issued. The work, however, as it is will ever remain a standard treatise on surgical subjects.

The Hip and its Diseases. By V. P. GIBNEY, A. M., M. D., Professor of Orthopedic Surgery in the New York Polyclinic, etc. New York and London: Bermingham & Co. 1884. 8vo. Pp. 412. (From Publishers.)

This is a very good book. It treats of accidents affecting the hip-joint as well as of the diseases thereof. The author is well known as a close student, an excellent practitioner and a clear writer. His experience also peculiarly qualifies him to publish such a book as is now before us, for he has resided for nearly thirteen years in the New York Hospital for the Ruptured and Crippled. The work is peculiarly clinical in its claims and merits. The practice adopted has not been limited to following any one author; but fair trials have been given to many of the plans of treatment suggested of the various diseases of the hip. The result is that the author has been able to detect the faults and virtues of the several plans of treatment advocated, and thus to deduce new and valuable suggestions. While in general recommending the conservative principles, still when necessity seems to call for it, Dr. Gibney is sufficiently bold in operations and in the application of apparatus suitable to the individual case under his care. The work is authoritative and must take rank among the standard works on diseases and injuries of the hip. A good *general* index as well as a supplemental index *of cases* are appended.

What to Do First in Accidents and Emergencies. By CHAS. W. DULLES, M. D., Surgeon to the Out-Door Department of the Presbyterian Hospital, etc. Philadelphia: P. Blakiston, Son & Co. 1883. 12mo. Pp. 119. (By mail from Publishers.)

As the title would indicate, this is "a manual explaining the treatment of surgical and other injuries in the absence of

the physician." The fact that this is the second edition indicates in great measure its general popularity. It is a good book for the family, for those in public relationships to society who are apt to be the first at the scene of accidents, etc. Frequently much might be done by the intelligent bystander under such circumstances before it is possible to secure professional services. We recommend this little book for all such purposes, and would be glad to be able to induce practitioners to persuade their families to purchase and study its teachings.

Brain Exhaustion, with Some Preliminary Considerations on Cerebral Dynamics. By J. LEONARD CORNING, M. D., Formerly Resident Assistant Physician to Hudson River State Hospital for the Insane, etc. New York: D. Appleton & Co. 1884. 12mo. Pp. 234. (For sale by Messrs. West, Johnston & Co., Richmond.)

The rapid increase in numbers of insane asylums, of hospitals for brain and nervous diseases—public and private—and the far greater number of cases and variety of nervous and mental diseases now than formerly, point to the necessity on the part of the profession to devote more special attention to this class of troubles than has heretofore been done by the general practitioner. Brain exhaustion is now a common disease. The intense struggles now-a-day for supremacy—whether in the financial circles or in the gratification of scientific ambition, or in the effort even to make a respectable showing in social life—all lead oftentimes to brain exhaustion, which, if recognized in its incipient stage, would enable the physician to do something to avert the worse than "exhaustion." This volume—not pretending to be an exhaustive treatise on the subject—is a book of high merit and usefulness. After some well-timed preliminary considerations, relating chiefly to the physiology of the brain, the author enters upon clinical and pathological descriptions. Then follows a chapter on causation, which may be beneficially studied even by the non-professional. The concluding section on the principles of treatment prove that Dr. Corning is an accomplished practitioner, and that his advice may well be adopted by the profession generally. In general, the work adopts the main views advocated by Dr. Wm. A. Hammond.

The Microscope and its Revelations. By WM. B. CARPENTER, C. B., M. D., LL. D., F. R. S., F. G. S., F. L. S., etc. Sixth Edition. Illustrated by 26 Plates and 500 Wood Engravings. (In two 8vo. volumes.) Vol. I, pp. 388. Vol. II, pp. 354. (From Publishers)

These volumes, as the April and May issues, 1883, of

"Wood's Library of Standard Medical Authors," are among the best received from this publishing house, so far as relates to these "Standard" publications. The value of the work before us is so great, and the eminence of the author is so well recognized the world over, that practitioners, whether physicians or surgeons, must consult this as a standard work on all doubtful questions. As issued by Messrs. William Wood & Co., of New York, the cost of the two volumes, of over 700 pages, will not exceed \$3.50, even if sent by mail to any part of the United States. The volumes represent or describe many rare specimens of organic, vegetable, and animal origin that are not described in most of the text-books.

Shakespeare as a Physician. By J. PORTMAN CHESNEY, M. D., ex-Secretary Medical Society of the State of Missouri; Corresponding Member of the Gynecological Society of Boston; Professor of Gynecology in the Northwestern Medical College, St. Joseph, Mo., etc. St. Louis. 1884. 8vo. Pp. 226. Cloth. Price, \$2.25. J. H. Chambers & Co., Publishers.

This is in some respects a remarkable work, showing a great amount of labor on the part of the author, and yet having a few curiously weak points. Dr. Chesney has endeavored to find and place every word, which in any way relates to medicine, surgery or obstetrics, in the complete works of the immortal bard, and with that to criticise the same and compare them with the medical thought of the present day. It seems remarkable that no writer has before this attempted such a book, and the greatest credit must be given the Doctor for his faithful study of the medical points contained in Shakespeare's works. To say that he has gathered everything relating to the subject, is probably too much to say—the wonder is that he has performed his duty so well and thoroughly. There is so much to praise in the book that the author will pardon us if we criticise a little—not intending to be harsh. First, most of the illustrations are illy chosen as to the subjects; such a book should be free from pictures relating to quackery of the present, etc., but that error can be easily remedied in another edition. Again, the reader dislikes to see Shakespeare referred to as "old 'Shake,'" as is the case on page 179, and there are several places where the phraseology seems not exactly suited to such a work.

As far as omissions of medical references from the playwright are concerned, we can, after a first reading of the book, see but one; in the chapter on Insanity, the author

might have shown the point that insanity often effectually obscures and masks other organic affections, the greater malady overpowering the less, as where King Lear, crazed with anger, says—in answer to the desire on the part of one of his friends that he should seek shelter from the terrible storm then beating upon them, exposed on the open plain—

“Thou think'st 'tis much that this contentious storm
Invades us to the skin; so 'tis to thee;
But *where the greater malady is fixed,*
The lesser is scarce felt;
... *the tempest in my mind*
Doth from my senses take all feeling else
Save what beats there.” —Lear, Act 3, Scene IV.

However we did not intend to find fault with the book, but rather to give it the high meed of praise that it deserves. The temptation to quote from it to show the wonderful knowledge or intuition of Shakespeare in medical matters, is very great, but we have only space here for one short quotation, which, setting aside that delightful method before used for pannus, would seem to exactly foreshadow the employment of jequirity—we refer to the often mentioned couplet:

“Take now some new infection to thine eye
And the rank poison of the old will die.”

Again, could there be anything more definite than this quotation from Timon of Athens, setting forth the exact results of syphilis? Timon, in addressing the two Athenian bawds, Phrynia and Timandra, says:

“Consumptions sow in hollow bones of man; strike their sharp shins, and mar men's spurring. Crack the lawyer's voice, that he may never more false title plead, nor sound his quilllets shrilly; down with the nose, down with it flat; take the bridge quite away; make curl'd-pate ruffians bald; and let the unscarr'd braggarts of the war derive some pain from you.”

We can safely say that no more interesting book has been presented to the medical profession for a long time, and we recommend the purchase of it to every physician that reads our pages.

Elementary Principles of Electro-Therapeutics for the Use of Physicians and Students. With 135 Illustrations. Prepared by C. M. HAYNES, M. D., McIntosh Galvanic and Faradic Battery Co., Chicago. 8vo. Pp. 426. Cloth. Price, \$2.00. (From Publishers by express.)

This book, evidently a compilation for the most part, shows knowledge on the part of the author of his subject, and ability to write a useful and instructive book. While of no material use to specialists in electro-therapy, it will prove

valuable in the hands of the general practitioner who assumes no pretension to specialism on the subject. After a glossary, defining the technical terms used in the book, there is a *general* introductory chapter on electricity, its phenomenal results, its development, etc. In almost an elementary style, the author then proceeds to explain magnetism, franklinism, galvanism, etc., and the value of each current of electricity. Although chiefly presenting descriptions of the McIntosh Battery, in its several forms, describing its special excellence, the book lays down plainly the principles for the construction of other valuable batteries. The work also enters into farado-galvanic therapeutics in general, and tells much of detail that will prove useful to any practitioner of medicine. The volume is nicely printed and well illustrated by wood cuts and other illustrations. If it had not had so much of the advertising caste, it would have been more popular. The work reminds one very much of a plain, outspoken, old-fashioned preacher—not that he has so much to teach except to remind one to remember or refresh his memory. Although not as full of original matter as some of the more complete works lately published upon the subject, we can safely commend it to the physician who is making his first studies in electro-therapeutics and desires primary instruction.

Editorial.

State Institutions for the Intemperate.—There can be no denial of the statement that intemperance, in many cases, amounts to absolute disease. When intemperance—whether acquired, or resulting from hereditary influence—becomes a *disease*, the means of support for self or family are wasted and penury results. Under such circumstance, efforts at self-reformation are frequently unavailing. The very influences which ought to have guarded the victims from degradation in the beginning of their downward career become less and less restraining as the disease advances. Many of the victims themselves realize this, and would willingly place themselves in positions to be recovered if they knew what to do, or where to go. But they are broken in fortune, forsaken by friendships that could help, lost to society, are an expense to the State, and often imprisoned in jails or penitentiaries or committed to lunatic asylums, where they are made to feel the disgrace so keenly as not to permit their better im-

pulses, as their soberness returns, to have a control over their will power.

For such a class of the community as that to which we limit our reference, we assert that something can be done. Moral sentiment of the unafflicted suggests that something ought to be done, and political economy demands the adoption of some such measure as we propose. Individual contributions will not accomplish the result—however anxious the individual citizen may be to see such an institution founded as we are about to suggest. Let those States that have not yet studied the matter, but which recognize the growing need for reform, establish “Homes” for their intemperate citizens, with laws regulating commitments, dismissals, etc.—such as now regulate the management of insane asylums, hospitals, etc.

Our attention has been specially directed to this subject by a recognition of the “demand of the times,” as witnessed in our rounds of practice, from conversations with doctors and citizens generally, and from an examination of the good reports that come to hand frequently from well conducted institutions already established in various parts of the country.

Our object in the present note is simply to call the attention of our readers to the subject, with the hope that interest may be developed in it, and that good may result. We attempt no argument based on facts in hand. We only throw out a suggestion.

Comparative Test of Diastatic Power of Malt Extracts.—We have elsewhere mentioned a few of the leading points of interest in connection with the exhibition of pharmaceutical preparations and surgical contrivances held at Masonic Temple during the late session of the American Medical Association in Washington, but omitted to refer to one that chanced to be of particular interest to us, because of our accidental personal connection with it.

On Friday, May 9, 1884, in common with other members of the Association, we received a card saying that during the morning and afternoon of that day some comparative tests would be made showing the diastatic value of maltine and other malt preparations, and happening to be in the hall early in the morning, we were requested by one of the gentlemen in charge of the Maltine Co.’s exhibit, to purchase at some drugstore a sample of Maltine and one of Trommer’s Extract of Malt, and without having them labelled, to give them to the chemist, who would be prepared to examine

them in public. In company with another delegate, we went to a drugstore on F street, and secured one four-ounce sample of each, both in precisely similar bottles, having them marked Nos. 1 and 2, the clerk informing us that No. 1 was Maltine and No. 2 Trommer's Extract of Malt. The bottles remained in our possession until we placed them in the hands of Prof. R. Dorsey Coale, of the University of Maryland, who conducted the examination.

Never having seen malt tested in the manner suggested, we were interested in watching each step of the process, which was as follows: Immediately on receipt of the two extracts, Prof. Coale weighed out one-half gramme of each, and first determined the small amount of sugar naturally contained in that portion of either, recording the exact quantity; he then mixed each half gramme sample with two hundred cubic centimetres of a $3\frac{1}{2}$ per cent. starch paste (making exactly seven grammes of starch), and placed both samples, so mixed, in the same water bath, the thermometer registering the heat of the bath at from 130° to 140° Fah. during the twenty minutes they remained therein. At the end of that time they were taken out, and by means of a Fehling's solution test the amount of sugar contained in each of the mixtures was determined, the sugar being calculated as dextrose. The amount of sugar found in the samples before admixture with the starch paste was then subtracted from the total amount of sugar found after digestion with the starch, and the calculation showed that No. 1 had formed 1.578 grammes of sugar and No. 2 had formed .739 gramme. An examination of the paper upon which we had written the druggist's information as to the names of the numbered preparations showed that No. 1 contained Maltine, and No. 2 Trommer's Extract of Malt, as before mentioned.

We followed closely each step of the tests and calculations, and are positive that no error was committed in either. The table was surrounded during the whole of the long time required for the examination by medical men who seemed to take considerable interest in the experiment. Prof. Coale explained to our satisfaction each step of the process, and showed plainly that the actual amount of sugar formed in the starch by the diastase represented the relative diastatic power of the two samples.

Medical College of Virginia.—During the session of the Board of Visitors of this State institution held June 6th, 1884, Dr. M. L. James was elected Professor of Practice;

Dr. Christopher Tompkins, Professor of Obstetrics; Dr. John N. Upshur, Professor of Materia Medica, Therapeutics, etc., and Dr. Geo. Ben. Johnston, Professor of Anatomy—all of Richmond, Va. We trust that these new elections to the Faculty will prove a blessing to the College—that they will so manage the affairs of the institution as not again to let its reputation go down in general professional esteem. An element of success with the Faculty would be for them now to strive to harmonize the profession and not further attempt to divide it. Under the new state of affairs, we shall hope for better things.

Alvelos.—This agent is the latest mentioned “cure for cancer,” and it seems possible that thorough experiments will be made with it, in the near future, with a view of deciding as to its real or supposed value. It has been brought to the notice of the profession by Dr. Velloso, of Pernambuco, whose slight experience in its employment makes him think it worthy of extended trial. The plant, called Alvelos, is a native of that country, belonging to the euphorbiaceæ, and the expressed juice alone is used as a topical application. Dr. Velloso has known of its successful employment in three cases of cancer of the face, two of them in his own practice. He states that the action of the juice is irritating, although without producing much pain, and that the morbid tissues are destroyed, their place being taken by healthy granulations, after perseverance in its use. Of course it is supposed to be more than simply a powerful vegetable escharotic, for if not we have plenty of better caustics.

One of the points made against it is that as only the fresh juice is useful, its value is limited to those regions alone where the plant can be grown.

Errata and Addenda to Article II. in April No.—1. The writer's name should be *Stapleton* Coates instead of Samuel.

2. Galen, whose medical acquirements were superior at the time in which he lived, was opposed in regard to bleeding by the followers of Erasistratus, who condemned it as increasing the debility with which they had to contend in the treatment of all diseases.

3. It would be difficult to effect a compromise between the “old Foggy” with his lancet and the “young Foggy” * with his whiskey.

*There are no young Foggies, but many young Foggies.

4. Is there not at this time much more abuse *in* hysterotomy and in the treatment of alleged uterine diseases generally than there ever was in phlebotomy employed by well educated physicians?

Hoff's Malt Extract.—Johann Hoff has lately advised that his Malt Extract should be taken in larger doses than has usually been the custom—say, half a bottle in the morning and the remaining half in the evening. The full tonic effect of the genuine preparation (Eisner and Mendelson's importation) is often lost by reason of the small doses in which it is prescribed. Our experience has been that if an ordinary claret glass full is given three times a day to begin with, and the quantity gradually increased, that physicians will find no reason to complain of its effect. It is much superior to bottled beer or porter in those cases in which the latter are often recommended. There is no reason why this preparation should not be taken with the meals, as a beverage, since its administration does not conflict with the action of other remedial agents which are being employed; and as its tonic properties are largely in excess, it is not in any way antagonistic to the especial digestive functions of other malt preparations. Eisner's importation of the genuine extract, while it may be a trifle more expensive than imitations, is richer in essential tonic properties, and therefore is really cheaper in the end. Clinical experience attests its value in all anæmic conditions, and its great popularity with those who have once employed it, is significant of its extreme worth. We speak of it simply as an invaluable tonic, and in this we are not detracting in the least from our views formerly expressed in regard to the diastatic quality of other malt extracts, or of the value of such agents as constructives. Johann Hoff's Malt does not depend so much upon its converting power as upon its property as a general and always efficient tonic in all cases where such is indicated. Our main purpose in this note is to call attention to the fact that Eisner's importation should be given in larger doses than those usually prescribed, and we are sure, if this suggestion is adopted, that full satisfaction will follow its use.

The Medical and Surgical Exhibit at Washington during the late National Association meeting, was by far the finest and most complete that has yet been presented to the notice of delegates. We would like to give a full description of the different displays, but our limited space forbids more than a

mere reference to some of the more prominent. That most enterprising firm, Parke, Davis & Co., occupied a room by themselves and made probably the largest exhibit attempted by any one firm. Their most noticeable articles were elastic soluble capsules containing different oils, and their very full display of the newer medicines was unrivalled. They were especially liberal in presenting to delegates specimens of their preparations. In the main room Lambert & Co. gave away samples of Listerine and Lithated Hydrangea, and as soon as the ladies of Washington discovered the value of the former as a dentrifice, Mr. Lambert and his assistants were besieged with requests for it, which, with genuine Virginian gallantry, Mr. Lambert invariably responded to. The space occupied by Mr. A. A. Mellier was very handsomely ornamented with a Tongaline shield, and attracted much attention. Houghton & Co. exhibited some very pretty samples of petroleum jelly (cosmoline), which for their purity and neat appearance received a great deal of praise. Reed & Carnrick showed a large combination of their well-known Beef Peptonoid preparations, and the Maltine Manufacturing Company presented every visitor with a 16-ounce bottle of Maltine. Horlick's Food for infants and invalids (prepared after Liebig's formula) made a neat display, and its value was very highly spoken of. Sharp and Dohme's display consisted of their valuable sugar-coated pills and granules, syrups, fluid extracts, elixirs, etc., and was very neatly arranged. At the farther end of the hall the McIntosh Co. not only exhibited their world-renowned galvanic and faradic batteries, but, behind a temporary screen, demonstrated the capillary circulation in living tissue by means of their powerful solar microscopes, attracting a great deal of attention. Not far from the crowd that surrounded the microscopes, Dr. Alexander, of Wooster, Ohio, displayed his newly-invented gynæcological and operating table. It is decidedly one of the most artistic and easiest managed affairs of the kind we have yet examined. Mr. C. Am Ende, of Hoboken, N. J., exhibited the best collection of antiseptic surgical materials we have ever seen in one of these displays, and deserves special mention for his enterprise. The handsomest exhibit in the main room was that of Wm. R. Warner & Co., who occupied the space near the centre. Their pharmaceutical preparations were arranged in the form of a large pyramid, and at the top stood a bronze statuette of Mercury. One of the features of this display was the case filled with World's Fair medals received at different times by the firm.

Accident to Dr. Hunter McGuire.—Just as we go to press we learn that a serious accident has happened to Dr. McGuire. He was driving toward Richmond from Bon Air, in company with some friends, and as the carriage descended a rocky hill, the pole became partially detached, the horses took fright, and in running away overturned the drag, throwing the occupants out upon the rocks with great violence. All were so badly injured that they could not move without assistance. They were taken to Bon Air in carriages, and it was feared that Dr. McGuire had received a dislocation of the hip together with a fracture of one or more ribs. Bon Air is a summer resort about eight miles from Richmond.

We learn later that although seriously hurt, the doctor is not injured to such an extent as at first supposed.

Gift to Bellevue Hospital Medical College.—One of the trustees of this popular school in New York City—Mr. Andrew Carnegie, equally well known for his wealth and liberality—has presented to the institution the sum of fifty thousand dollars, to be expended in the erection and complete furnishing of a building to be devoted to the study and teaching of everything relating to experimental and microscopical research in the different departments of medicine. Although the laboratories, etc., will belong entirely to Bellevue College, yet students unconnected with that institution will be allowed to partake of the advantages to be derived from their use; not only will students from other colleges be admitted, but the building will be open to members of the medical profession throughout the country. There is probably no building of the size proposed and devoted to the same purposes now in existence in the country.

The American Journal of Ophthalmology is a journal of fine promise—especially to specialists—which has been just begun. It is the only *monthly* periodical devoted solely to ophthalmology published in the United States, and is worthy of the patronage it hopes to receive. The address of the publishers is “405 E. 3rd St., St. Louis, Mo.”

Tongaline.—Many have become victims to the use of opium and morphine from the administration of these drugs for the relief of neuralgia. It is very gratifying to observe that such dangerous consequences may be averted by the use of Tongaline or Fluid Tongue Salicylatus, which is almost a specific in the acute forms of that complaint.—*Ed. from June No. Medical Brief.*

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ART. I.—*Belladonna*—Some of its Therapeutic Uses.* By P. N. CILLEY, M. D., Lowndesborough, Ala.

This drug has been selected as the subject for discussion, with no intention on my part to present an elaborate disquisition upon the philosophy of its action, or of even naming but a few of its most prominent virtues, and elucidating its most important effects on the human system. This I will endeavor to illustrate and make clear, by mentioning some cases in which I am satisfied it was eminently useful in my hands. My impression is that it has been too much neglected by the profession generally; and my belief in it as an extremely valuable medicinal agent, is my excuse for calling attention to it.

I will first report a case of *obstruction of the bowels* and the treatment employed.

In 1880, immediately after having eaten a hearty meal, while rolling a cask-ful of corn on its chine across my crib, I was subjected to a sudden, violent twist and wrench of my whole body, requiring a tension of all the abdominal and lumbar muscles to prevent the cask from falling. On the instant of this wrench I experienced a sharp stabbing pain in the central and outer part of the right hypogastric region. This pain continued very severe, and in a few min-

*Read before the Medical Society of Lowndes Co., Ala.

utes I was compelled to go to stool, and had a full natural action.

Partial relief from the pain followed the action, but in a short time nausea and faintness set in. Desiring to rid the stomach of its contents, I took an emetic of mustard, which acted freely, but immediately on its action the pain returned.

A rupture was suspected, but a critical examination by my physicians, Drs. Buse and McBee, did not confirm this expectation, but satisfied them of the existence of an obstruction, probably an invagination, or intussusception of the large bowel at its junction with the small intestine. Probably the violent muscular contraction at the moment the trunk was twisted upon itself—the stomach being distended with food—forced a portion of the bowel within an adjacent portion, perhaps the smaller within the larger at their junction—this displacement naturally setting up spasmodic contraction and constriction of the invaginated parts.

A small tumefaction, easy to move, speedily showed itself at the point of pain, not being very sensitive to touch at the outset, but increasing in tenderness on pressure, as its size increased. From the moment of its development until its removal, I am confident no fecal matter passed through that point in the bowels.

Anodynes, cathartics, enemas, poultices, hot and cold applications, and a large list of remedies, general and topical, were brought to bear on that slowly-increasing tumor, but it held the fort against them all; so I will not particularize.

Everything taken in the stomach was speedily rejected, and all enemas were quickly returned.

Local applications doubtless retarded inflammatory action, and anodynes lessened sensibility to pain, but all failed to open this obstructed viaduct.

Large injections of warm water were thrown slowly into the bowels by means of a Davidson syringe, in order to fill and distend the colon up to the point of obstruction, and thus, if possible, lift off the contracted envelope; but when the fluid began to impinge upon the irritated mucous membrane, there was not strength in my muscles sufficient to resist the violent ejection of it, and the resulting pain was intolerable.

In the first stages of such an attack, after the spasmodic action of the muscular tissues has had time to abate, and before irritation and inflammation have been set up, I feel assured this form of treatment might often be pushed to success; but in the more advanced stages, when the tumefaction

is well marked and the integrity of the tissues perhaps involved, I apprehend danger of rupture in using much pressure. In my case I will not say it gave no aid to the other means used, for possibly, notwithstanding the increase of suffering, it paved the way for more effective action of other remedies.

I was attacked on Monday morning, and these enemas were used on Wednesday and Thursday. On the latter day three drops of croton oil were given, but rejected by the stomach instantly.

Late on Thursday night a plaster spread with Tilden's extract of belladonna, four by six inches in size, was applied to the right side of the abdomen, and kept there. At 2 o'clock P. M., Friday, the surface about the umbilicus and in the right hypogastrium was rubbed with three drops of croton oil, and a plaster of belladonna applied to the entire surface of the abdomen, and five hours later eight drops of the croton oil were well rubbed in, and the belladonna again applied with a warm poultice over it.

At 9 o'clock P. M. of the same day, I discovered for the first time the acrid taste, and roughness in the throat characteristic of the belladonna, and half an hour later the small bowel, for the first time since the accident, set up peristaltic action, accompanied by borborygmus. This rapidly found its way down to the obstruction, where a sensation of tugging, or pulling, became manifest, with a well marked sensation of slipping in the bowel at the invagination; and I as distinctly felt the inner fold drawn out of the embrace of the outer as I do now my finger drawn out from the grasp of my other hand. I thought I knew what pain was before this, but the slipping of that bowel, each time it moved, had such a world of anguish in it as I never felt before, and hope never to experience again.

The bowels were speedily moved, discharging a dark fluid, extremely offensive. Hypercatharsis had now to be guarded against by anodynes and stimulants, and irritation subdued by topical and other remedies, and I was soon on my feet again; but for a year I could not sit in the saddle without pain.

What relieved me? and how? Was not the belladonna an indispensable integer in the cure? We all know it has a wonderful effect in relaxing muscular tissue and combatting irritative contractility of muscular fibre by paralyzing the motor nerves. Here was what we desired to unfasten—this grip of the bowel upon itself.

Then again, it is well understood that belladonna, in moderate effect, increases peristaltic action by paralyzing the inhibitory nerves which control the intestinal function: might not this increase of peristalsis have been sufficient to untie the knot without the aid of croton oil?

And further, we know that through its paralyzing the peripheral vagi (the inhibitory nerves of the heart), it increases the heart's action, gives more *vis a tergo*, sends a more powerful current through the arterioles into the venous capillaries, establishing an exaltation in the venules. Now, what more reasonable conclusion is to be presumed than that under this exalted circulation, the invaginated and constricted coats of the bowel should have had their depressed circulation increased, their lost vitality restored, and their natural functions re-established?

Perhaps the croton oil, carried into the circulation by absorption, was, just at this juncture, calculated to set up violent peristalsis and open the *primæ viæ*. Had not relief come when it did I should have insisted on having the cavity of the abdomen opened, and reduction attempted by taxis.

In all such protracted cases, when the bowels are moved, the practitioner should carefully guard against excessive purgation and prostration.

Many years ago I treated in the same year two cases of obstructed bowels, both young negro men. Belladonna was the leading remedy, and in both the obstruction was removed. The one, in the care of a vigilant master, strictly conforming to directions, made an excellent recovery; but the other, left to the tender mercies of a careless overseer, was neglected, no support being given, and after long and violent purging sank and died.

But warm water injections, croton oil and belladonna will not cure all cases of obstruction of the bowels. I believe the belladonna more useful than any other remedy, and I have used it locally and internally, but under favorable circumstances, the former method has my preference. I give the solid extract in half-grain doses every hour, until the acrid taste and dilating pupil warns me to discontinue it.

Belladonna is an admirable assistant in the reduction of

strangulated hernia. Apply the soft extract freely to the strictured neck after softening the surface with warm water, exercise a little patience, and then, grasping the sack with both hands, gently compress it, drawing it away from the neck, swaying it from side to side, and, take my word for it, in nineteen cases out of twenty of recent strangulation, the bowels will be speedily returned—especially if you elevate the hips and relax the abdominal walls.

In *spasmodic stricture of the ureters or urethra*, and in the passage of calculi through these ducts, I have seen speedy relief result from the use of this drug, applied locally, or given internally either by the mouth, rectum or urethra.

In *strangulated hemorrhoidal tumors*, where those oft-repeated spasmodic contractions of the sphincter ani are causing so much distress, nothing can surpass, in promptness, the relief procured by a liberal application of the extract of belladonna to the anus and perineum, after softening the parts with warm water to facilitate absorption. Nor is this relief palliative alone. If given in half-grain doses once, twice, or three times a day, as may be necessary to keep the bowels open, it will permanently cure many cases.

In two cases of *paraphymosis*, it allowed easy reduction, where the knife would have been a terror. Intelligent effort at reduction had been previously used in vain. The extract was applied locally.

In *inflammation of the iris*, or any other portion of the eye, the local application of belladonna should not be neglected, as it prevents, or breaks up, adhesions that would impair vision. It may be applied around the eye, or a solution may be dropped in the eye—and a cloth dipped in the solution may be applied over the organ.

But the trouble in which I regard it as the remedy, *par excellence*, is in protracted labor, with rigid, thin, partly dilated os where the patient is worn out, irritable and nervous from long continued, short and sharp cutting pains. From the time of the first masters until now, thousands of plans have been devised to relieve this distressing complication; many of these plans are useful; most of them will relieve if persisted in long enough. But in belladonna I offer one agent

that has never failed in my hands to produce a speedy change. With a little of the soft extract on my index finger, I smear it on the os uteri, both without and within heavily, for an inch or more in width all around the ring. But, should any obstacle interpose to render its application difficult by the finger, the extract is dissolved in a little warm water, and applied by the aid of a vaginal syringe. The application of the belladonna may occasionally require one or two repetitions at intervals of half an hour. In most cases, however, before the expiration of that time, the ring suddenly becomes soft and thickened, yielding kindly to the pressure of the head; dilatation occurs with wonderful rapidity, the pains become protracted and expulsive, the nervous irritability subsides, the patient returns with alacrity to the task in hand, and a speedy delivery is the result.

Nor is it less useful in a *rigid perineum*, if smeared on the parts. But strict care should be observed to support the perinæum through every pain, as the dilatation occurs so suddenly, and in most cases commences to develop its effects at the posterior margin of the perinæum before the meatus is impressed; and in this condition a violent pain might cause the head to pierce the perinæum and tear its way through. I am not quite sure but a free use of belladonna increases liability to post partum hæmorrhage. This should be guarded against.

In *dysmenorrhœa* belladonna is eminently useful, especially in that form of it dependent upon a constriction of the cervix and os uteri, a narrowing of their canal, and a dense, hardened and unyielding condition of their tissues. It was extensively used by my preceptor and former partner, Dr. H. V. Wooten, and subsequently by myself, in the formula recommended by Drs. Cartwright and Holmes, of Mississippi.

R _y	Powdered camphor.....	135 grains.
	Extr. belladonna.....	27 “
	Sulph. quinine.....	27 “

Mix and make seventy-two pills.

On the incursion of the pain give one of these pills, and repeat it every half hour until the violence of the attack abates, or a pungent, acrid taste in the throat, resembling

tobacco, and dimness of vision, from dilatation of the pupil warn the medical attendant of the development of the effects of the drug, and point to the propriety of its discontinuance. Relief from pain will surely follow. Occasionally, but not often, the pain returns before the close of that catamenial period, and if so the pills should be repeated. So pointed is the relief from this preparation, that several of my female friends are unwilling to meet these periods unless provided with this combination or some modification of it.

Belladonna often disappoints the profession, because of the carelessness or dishonesty of druggists. Be sure you have a reliable preparation, fresh and pure, and you will find it will do all and more than I have claimed for it.

ART. II.—*New and Valuable Remedies*—(I.) *Damiana*. (II.) *Sucus Alterans*. (III.) *Caulocorea*. By JOHN J. CALDWELL, M. D., Baltimore, Md.

(I.) *DAMIANA* was used in Mexico many years ago, but I believe I was the first to capture this Mexican beauty and present its wonderful merits to the profession at large. In years of trials it has worn well as manifested by experiments and experience of many of our best men from every quarter of the globe. It has had severe trials and criticisms; it has been counterfeited and substituted, but scientists have exposed its imitators, and it has proven and reproven its own merit. I am proud to have added this one brick to the column erected to the honor and to the memory of our noble calling.

In regard to the history, botany, etc., of *damiana*, we condense the following descriptions from the *Therapeutical Gazette*:

“As early as 1699, it was learned through the chronicles of the Spanish Missionary, Juan Maria de Salvatierra, that *damiana* was employed by the natives of Mexico as a remedy in impotency and to empower them to perform the sexual act. It is for this purpose, principally, that this plant has been administered by Mexican physicians up to the present day. It was not, however, until 1874 that the drug was in-

troduced into the United States, and Dr. John J. Caldwell, of Baltimore, is credited with having first closely studied its action and made its virtues as a powerful aphrodisiac known through medical journals."

Botanical Origin.—(From an article by Dr. Ig. Urban, in *Archiv. des Pharmacie, Zeitschrift des Deutschen Apotheker Vereins*, and translated for *Therapeutic Gazette*, June, 1882, p. 209.) For the botanical description of the plant which yields damiana, we are indebted to Prof. Lester F. Ward. This naturalist recognized in it a new turneracea, and, in view of its special application, he denominated it *turnera aphrodisiaca*, furnishing, at the same time, the *Virginia Medical Monthly* (April, 1876, p. 49,) with a paper upon its peculiar distinctive qualities.

As soon as this journal reached the botanists of Europe, Batten republished this descriptive article in his *Journal of Botany* (New Series, Vol. IX., 1880, p. 20). Through the agencies, as well as the *Biology of Central America (Contributions to the Knowledge of the Fauna and Flora of Mexico, Central America)*, Edited by Godman and Salvin; *Botany*, by W. B. Hemsley, Vol. I., p. 474), in which this plant is likewise mentioned, though only by name, our knowledge has been gained of the existence of this species of *turnera*.

"After I had collected from all the larger European museums, with the exception of the English, materials for an enlarged and detailed monograph upon the whole family of the shrub, I was somewhat surprised to discover, amidst all these numerous available specimens coming from Mexico, not one which answered, even in a measure, its characteristic botanical definition. Desirous of securing the drug, I addressed myself, simultaneously, to the firm of Gehe & Co., in Dresden, and to Parke, Davis & Co., in Detroit, Michigan, and received, in return, from the Messrs. Gehe & Co., samples of *turnera aphrodisiaca*, which agreed, in the most accurate manner, with the description of Ward; whilst the house of Parke, Davis & Co. favored me, in a most charming spirit of kindness, not only with similar specimens, but also with a second species, originating in California, which is represented as coming from *turnera diffusa* (Willa). This

consignment was accompanied, at the same time, with descriptive circulars, sent by this energetic firm, which contain all that is essential, expecting the history, therapeutic use and action of the drug.

"Genuine damiana, such as is derived from *turnera aphrodisiaca* and *turnera diffusa*, appears in commerce in the form of leaves and young shoots, with which flowers, fruit, or portions of fruit, seeds, even old branches are variously mingled, and possess a fragrance that reminds one of lemons, combined with an aromatic flavor. It readily gives up its constituent properties to hot water, or a mixture of alcohol and water.

"Because there is often sold under the name of damiana a drug consisting of the leaves of *aplopapus discoidens*, D. C. or *Biglovia venata*, Gray (two *compositæ*), and as there exist also one or two other plants under the name of damiana, it will be well to enumerate here the characteristics by which it can be proven with certainty that a drug is derived from the *turneracea*. This is most readily done when seeds, fruits or flowers are mixed with the leaves. The blossoms have a five-leaved calyx, the leaves growing more or less into a cylindrical, short, bell-shaped or funnel-shaped tube; generally these not very distinct nerves run through the free extremities of the leaves, the middle nerve being usually prolonged in the form of short threads beyond the point of the calyx leaf. The integumentary edges of the two inner calyx leaves point to their quincuncial covering in the bud later on. The five free petals are inserted in the throat of the calyx tube and alternate with the calyx teeth; they have an outline from oblong to broad, reversed egg-shaped and are uniformly narrowed toward their bases; their covering in the bud is twisted in such a manner that if you imagine yourself placed in the centre of the bud, the covering (outer) part of each flower-leaf lays to the right hand, the covered one to the left. The five stamens which grow upon the basis of the calyx tube, or somewhat above the basis, stand in front of the calyx leaves and enter the anthers, which open inwardly lengthways from their back. From the point of the unilocular ovary, with its greater or less number of eggs,

three free styles originate, one of which falls over one of the foreleaves; their heads are slit more or less distinctly whip-like. The fruit (at least of the family *Turnera*) is a globular or oblong capsule, from a loculicidal opening at the top; the three flaps bear the seeds or their stems at the centre and generally remain united at the base; the finely mashed venous network of the back usually becomes indistinct by the swelling of the small intervening spaces which protrude like warts of greater or lesser size. The seeds are particularly characteristic; from short oval to oblong in circumference, but generally more or less curved toward the raphi; the cone-shaped or semi-globular navel is defined against the seed by a distinct narrowing. The chalaza sometimes lays at the very blunt basis, sometimes more toward the front (bauchseite), and often protrudes in the shape of a wart or of a very short hollow uvula. The raphi running from the chalaza to the hilum is commonly recognizable by its darker color; the seed-coat is handsome and regularly net-like, the longitudinal veins project somewhat more markedly, the cross-veins approach each other more closely; from the hilum (scar) proceeds a thin-skinned whitish or yellowish, finally often brownish, anillus, which adheres to the seed on its lower side, and generally reaches to the base—in the axil between the peduncle and the axis of derivation—but always only at this spot; with most species side-buds (serial proliferation) occur, which, after the dropping of the fruit, sometimes come to a development and thus cause the further ramification of the plant.

“The leaves of the turneracea are of the most manifold form, but always alternate, with exception of the two leaves following the cotyledons. However, I believe a number of turneracea amongst which *T. aprodisiaca* and *T. diffusa* can be recognized as such in their sterile state; for the leaves of those on their reverse side, as well as the younger branches, the foreleaves, the outside of the calyx, the ovarium and the fruit are adorned with very small glands, which had hitherto not been noticed. I presume even that these glands furnish the active principle of the damiana. Unfortunately, these glands are not found on the species which are cultivated in

botanical gardens, and therefore such description as I can give of their structure is imperfect. If leaves of damiana are boiled up, and if the yellow or whitish points are carefully removed with a steel needle, they show under the microscope a spherical circumference with indentations, as the raspberry shows them in its individual berries, when seen from above. Their size is about 0.08 to 0.1 mm. When crushed, they leave a pasty mass. Should the officinal material really be contained in these, then very likely also other, especially Brazilian species, might be employed as damiana, as the same structures are found in these. I shall, later, in a special communication, report the names and habitat of these species, nearly all of which has never been described.

"At present we refer only to *T. aphrodisiaca* and *T. diffusa*. These belong to a small group of shrub-like size, which are distinguished by comparatively small leaves with veins strongly indented from the upperside and with teeth curved backwards on the leaf edges; furthermore, by the presence of very small, mostly broom-like *bractea*, which originate out of the petiole itself, somewhat above its insertion and just below its articulation; further by solitary blossoms inserted into the petioles between the stipels, by two fore-leaves originating close under the calyx and by strongly curved seeds. The two drugs are easily distinguished one from the other."

I am well satisfied from quite an extended experience with the tincture and extract of this plant of its powerful influence over the urino-genital organs of both sexes, as in moderate doses it increases the flow of urine as well as the sexual appetite.

The cases that have come under my observation are given as an introduction to this new remedy and for what they are worth, solely with the view of calling the attention of the profession to the virtues of this pretty little plant, culled from the prolific soil of Mexico—a field, no doubt, teeming with a wealth of unknown medicines, waiting for the progress of a searching science to penetrate and grasp her hidden treasures. In its administration, I prefer the fluid extract, as it is less bulky, more positive in its effects, and more reliable and uniform, as proven in the cases now under my

care. In smaller doses it seems to have a specific effect on all the organs of the pelvis, giving increased tone and activity to all the secretions of that vicinity.

After a continued experience of several years with preparations of this plant, commonly known as damiana, and lately determined by L. Word as *turnera aphrodisiaca*, I find that my first papers and experiments have been well sustained in establishing its merits as a powerful, permanent and determined aphrodisiac, as well as an alterative aperient of remarkably fine quality, indeed, of such a nature that, should it possess no other medical value, this alone would place it high in the therapeutical world, when well-known and appreciated. My attention has been called time and again by my patients to this fact, that after a few days' exhibition of this fluid extract, which preparation I prefer to prescribe to all others, in doses of a dessert-spoonful three times a day, their bowels have been moved with mushy stools often twice a day. My esteemed friend, Alex. Murray, M. D., F. R. C. S., of New York city, was the first to call attention to this feature of damiana through the *Medical Record*.

The name damiana appears in the mythology of the Ephesians. In the temple of Diana, the most gorgeous and beautiful halls were termed "The Damiana Corridors," or "The Amoranda."

"Reduced sexual power, from whatever cause it may arise, is one of the most distressing of maladies, and is therefore entitled to the deepest sympathy and consideration on the part of the honest practitioner, by whom, unfortunately, it is rarely discussed." From the intimate connection which exists between the urethra, the prostate gland, the seminal vesicles, ejaculatory and the differential ducts, and the tubes, it is not surprising that lesions of that passage should exert a powerful effect upon the functions of generation, whether that effect be due to the extension of morbid action through continuity of structure, or to reflex action. Hence it is that many persons affected with urethral disorders suffer from more or less marked disturbance in their sexual power, amounting in some instances to impotence, or inability to

copulate, either from inability of introcession or premature ejaculation, both states being associated with imperfect or transient erections—in many cases dependent upon stricture, inflammation, and hyperæsthesia of the posterior portion of the urethra.

CASE 1.—T. W., a young gentleman of wealth and somewhat “roue,” called at my office September 25th, the very picture of health, æt. about 30, complaining of a failure in his effort at copulation, owing to a partial loss of erectile effort. On examination I found the history of excessive venery only. The sound exploration failed to discover either stricture or tenderness of the urethral tract. All other functions being normal, I advised him simple rest for a couple of weeks. After due trial he returned, reporting treatment so far a failure. I then placed him upon the fluid extract of damiana—tablespoonful doses, well diluted, to be taken morning and evening, together with a generous diet, and a respite from all genital exercise. After ten days of such treatment he reported himself fully rehabilitated and fully potent.

CASE 2.—September 2d, a gentleman of middle life, aged in the fifties, Mr. D., calls concerning an indescribable pain or sensation about the head, with a loss of power and desire for sexual connection; attributed it to great and continued trouble in his business relations. On examination I failed to find any lesions of the genito-urinary organs or functional disturbance of his alimentary canal. Indeed, he seemed in all respects a fair specimen of health, with the two exceptions named. I ordered him free use of damiana, and occasionally, when the pain in the head was severe, application of the constant current of electricity to the nape of his neck, down the spinal column. This treatment was continued several weeks with very fair results, though his business troubles were still on his mind.

CASE 3.—W. E. J., æt. 24, called December 10th, apparently in good health, but complaining of inability to perform the sexual act. I failed to discover any lesion of the urethral tract or any other trouble about his person, except that his virile organ was small and flaccid. He reports good erections when abed and alone, but utter failure of this effort when in company with a female about to copulate. I deemed this a case of genital demoralization, and placed him under the most advanced treatment for the same, with electricity, rest, moral suasion, cold baths, etc., and the very best fluid extract damiana, fully as to quality and time, but all in vain.

CASE 4.—R. J., æt. 54, called August 2d, complaining of a gradual loss of health, weight and genital power. Here, too, we failed to discover any lesions of the genital organs. His seemed to be a case of general atrophy from debilitated digestion and assimilation of several years' standing, which yielded kindly to local and general faradization after a few months' treatment. But his genital organs were still weak and impotent. Thereupon we placed him on liberal doses of fluid extract of damiana, which acted like a charm after a few weeks' administration. The first effects were to cause two full mushy stools per day, accompanied by an increasing appetite, and finally a restoration of his lost sexual power.

CASE 5.—Mr. J. H., æt. 25, called January 2d, suffering loss of copulative power. Upon an examination of the urethral tract, the sound was arrested by two strictures at the prostatic portion of the urethra. The neck of the bladder was found irritable, with excessive mucal discharge. The strictures were gradually dilated by the appropriate instruments for that use; the bladder washed daily with a double silver catheter, using as a wash a weak solution of atropine. Internally administered gelsemium with the bromide of sodium. This was continued until the acute symptoms had subsided, when damiana was administered. The sound passed daily, through which a constant current of electricity was passed from the sacrum to the end of the sound. In all, this treatment lasted about one year. Since then the young gentleman has married, and finds himself fully able to do family duty.

Says Tanner, "*Spermatorrhœa* is a deranged state of mental and bodily health, due to too frequent escape of seminal fluids. Masturbation is the most common cause."

Symptoms.—There may be only a separate escape of seminal fluid, or this may be associated with morbid changes in the vesicular seminales, ejaculatory ducts, bulbous portion of urethra and prostate gland. Urine sometimes rendered slightly albuminous by seminal fluid.

CASE I.—S. T., of N. C., æt. 45 years, called June 12th, suffering from frequent loss of seminal fluid, due, as he said, to grief and sad reverses of fortune. The penis was small and flabby. Otherwise there was no lesion that could be found. His symptoms were as follows: General debility, with some emaciation; also much irritability. Complained of dullness of vision and of poor memory. Bowels constipated and flatulent, with occasional attacks of giddiness, headache and palpitation. In his case I suspected excessive

venery, as he informed me that he had lately been in the habit of keeping a mistress who was greatly amative. The treatment of his case was rest, a change of scene, nourishing diet, as the hygienic measures. Medically—large doses of the fluid extract of damiana, which was continued through the months of June and July, with the best of results, for his seminal losses ceased, he grew fleshy in body and better contented mentally. A few weeks subsequently he came to the city for the treatment of general rheumatic and neuralgic pains, which yielded kindly to quinine and electricity. He had been visiting a malarial district. His old trouble (spermatorrhœa) had entirely disappeared. The characteristics of damiana) viz.: alterative effects on the alimentary canal, and the tonic effects upon the urino-genital organs were decidedly manifested in his experience.

It will be well at this juncture to call the attention of the profession to the remarkable and beneficial action of this new drug (damiana) in the various unhealthy or irregular discharges of the genito-urinary organs in the female as well as the male. Several of my medical brethren have strongly testified in its favor in the treatment of *sterility*, when the uterus and its appendages seem to suffer simply from inertia. I found it an excellent remedy in cases of amenorrhœa, dysmenorrhœa and leucorrhœa.

CASE II.—Mrs. B., æt. 28, called April 6th, suffering from amenorrhœa. Had been married several years without issue; as a consequence was unhappy and anxious, complained of excessive leucorrhœa, though apparently she was robust and healthy. Cheeks rosy, still she complained of nervous irritability, and had a dreamy and absent kind of manner.

Hygienic Treatment.—Moderate mental and bodily work; cheerful society; to avoid heavy meals; to sleep upon a hard mattress and alone during treatment. Medically ordered the use of fluid extract of damiana, teaspoonful doses, in milk, three or four times a day; to omit tea and coffee and other stimulants; to drink freely of milk and buttermilk. After pursuing this treatment two months all the symptoms improved; she became perfectly regular in her menses, became pregnant at the end of the fourth month after beginning the use of damiana, and was delivered at the end of regular time of a healthy boy.

CASE III.—Mr. D. H., æt. 24, called January 7th, suffering from spermatorrhœa. He complained of loss of seminal fluid night and day, and particularly after he had passed his water or fœces. He attributed it solely to masturbation, and from

his general appearance I judged he was correct. He, too, suffered from general weakness, nervous irritability, with a dreamy, absent kind of manner; flatulence and constipation; dullness of sight, and perhaps of hearing, weakness of memory, attacks of palpitation, giddiness, headache and neuralgia. He would keep his bed a week or two at a time, and frequently go days without eating or speaking a word to any one. This condition had existed for a year or more, when his father, fearful that the young man was about to loose his mind (judging from his eccentricities, and from many odd and unusual ways) called my attention to his case, when I obtained the above history. I placed him under the best hygienic influence, and required him to make daily calls at my office, when I used moral suasion and encouragement, endeavored to instill better ideas, more manly thoughts and actions, to imbue him with brighter hopes for the future; also instructed his family to put themselves to greater efforts to make home attractive, cheerful and pleasant to him. Medically, I relied upon our old and tried friend, the different preparations of damiana, with entire success, though in this case it required better than a year of skillful management to complete the restoration mentally and physically.

As to the combination with milk, I may casually say that all the preparations containing any resinous solutions, are more agreeably taken, and more readily assimilated when held in suspension in milk. I also would note that I have found all the bromide salts to be more ready for use and to give better results when held in solution in milk.

CASE IV.—Mr. K., æt. 26, called on February 2d, suffering from chronic prostatitis and continued loss of prostatic fluids, dripping away from the head of his penis upon his underwear. The history of the case was that this trouble originated from a long neglected gonorrhœa, and frequent exposures to cold and unhealthy locations. His symptoms were pain and tenderness about the perinæum, with a sense of heat and frequent efforts at passing water. He had pain on defecation, feeling of weight about the perineum and rectum, and experienced pain when passing the catheter. *Treatment.*—Perfect rest in bed; used belladonna to perineum; bromide in solution of milk as injections per rectum; simple nourishment without stimulus; all this until the acute stage had passed. Then I placed him upon damiana as an alterative and tonic, which treatment was maintained for several months, or indeed until all his unhappy symptoms had disappeared.

In conclusion, I will state that these are only a few of the typical cases of chronic urino-genital diseases that have come under my observation during the past year or more, in which I have given this new remedy, damiana, (*turnera aprodisiaca*), a full and fair trial. The results have been more satisfactory than from any other course that I have tried or had knowledge of in an extended experience in these troubles. I would most cordially solicit my medical brethren to give it (the genuine article) fully and freely in such cases as are named above, and report their experience for the benefit of the profession at large.

(II.) *SUCCUS ALTERANS* (McDade) is the fresh preserved juices of the true medicinal plants: *stillingia sylvatica*, *smilax*, *sarsaparilla*, *phytolacca decandra*, *lappa minor*, *xanthoxylum caroliniana*, collected in their native growth under the immediate supervision of Dr. G. W. McDade, of Montgomery county, Alabama, U. S. A., which has been recommended by Dr. J. Marion Sims in the *British Medical Journal*, Dr. B. Rush Jones and other prominent physicians.

Aside from its established value in syphilis, it is highly esteemed as a general alterative in ordinary blood diseases, used as follows:

R. *Succus alterans* (McDade).....f. ʒiv.
 Syrupus.....f. ʒxij.

Dose—One to two teaspoonsfuls three times a day before meals.

Dr. Ephriam Cutter, in *Gaillard's Medical Journal* (February, 1884), says one of the last, if not the last, paper of that magnificent surgeon, Dr. J. Marion Sims, shows his character in the lustrous light of a simple, child-like, genuine love of truth, justice and helpfulness to others. The picture is briefly this: More than forty years ago Dr. Sims knew that the medicine-men of the Creek Indians had the reputation of curing syphilis. Lately he re-visited the scenes of his youth, and, eager for truth, found that a mulatto slave, Horace King, made the preparation—*stillingia* being well known as a principle ingredient of the remedy. He found that Dr. McDade had investigated the formula used by the mulatto, and had brought it into pharmaceutical standing and recog-

nition. Dr. Sims then came out boldly in the *British Medical Journal*, tells all he knows about this Indian remedy, gives due credit to his authorities, and associates his own good and great name with that of Horace King, the slave, and now the medical world knows, or is supposed to know, of the value of the Indian Creek remedy in syphilis. How few physicians would have dared to do such a thing—to connect their names with “Indian remedies.”

I have been investigating the new and valuable remedy with much interest and success, and will give a few extracts as follows :

CASE I.—Says Dr. Jones : A case of a female about 22 years of age, well developed and healthy in all other respects. She had a large chancre on the right labia, with numerous smaller ones over the entire vulva ; the parts were swollen and very sensitive, and there was slight enlargement of the glands in the right groin.

On January 1st, 1884, being the first time I had seen her, I prescribed the succus alterans (McDade). In one week the improvement was very manifest—the ulcers diminishing in number and being much less sensitive, giving no inconvenience or pain. On the 15th day they had *all completely healed*, leaving only slight traces of where they had been located. She had used only a half pint of the medicine. I directed a continuance of the same until the pint should be used. There was no other medicine taken during the treatment. Scrupulous cleanliness was enjoined, and an application of iodoform lotion ordered to the ulcers once or twice a day after ablutions, which I do not regard as essential to the treatment, but to insure cleanliness and at the same time as a placebo, as I find my patients generally anxious to make some application to the ulcers.

I have been using Dr. McDade’s formula in the treatment of syphilis in all its stages, for several years past, with the most entire success and satisfaction, both to my patients and myself.

CASE II.—Says Dr. McClintock : A. B., aged about 25 years, a carpenter, came to me in August last, having been treated by various physicians for syphilis for more than three years. He was greatly emaciated, and from his inability to work at his trade was in a deplorable condition. The odor from the ulcers, which covered almost his entire body, was

so offensive I could not bear his presence in my office. His testicles were swollen and indurated, and it was with great difficulty he could walk. He had been so overdosed with mercurials that his teeth were loose and he seemed beyond medical aid; but as I had recently read the article in the *British Medical Journal* on the treatment of syphilis by Dr. J. Marion Sims, I prescribed for him the mixed fluid extracts of a well known eastern manufacturer; but using this for several weeks without the least benefit, I had abandoned the case. Since then the patient has taken two pints of succus alterans (McDade). There is not now a sore on his body; he has entirely regained his health, and he is working daily at his trade.

CASE III.—A man came to me who, from syphilis, had entirely lost his hair, eyebrows and moustache, besides suffering from the usual symptoms. He was put on succus alterans (McDade), and has entirely recovered his health, and has now a splendid growth of hair, as well as a new growth of eyebrows and moustache.

CASE IV.—Is that of a man having a large node upon his left leg. I prescribed succus alterans (McDade) for him, and before he had taken one pint the node had entirely disappeared. I now use the remedy without additions and with uniform success. I believe I get the best results when directing it to be taken about one hour after meals.

CASE V.—Says Dr. Baker: I take pleasure in reporting the following case: L. T., a female, white, aged 37 years, contracted syphilis two and a half years ago; says she had no chancres, had indurated swelling of the inguinal glands, without suppuration.

August 11th, 1883.—Her condition is as follows: Complexion cadaveric, she is pale and emaciated, no appetite, rheumatism in the wrists, ankles and knee joints, which are swollen; pains in the clavicle and head; on the latter are five nodes; induration and enlargement of the glands on the back of the neck. Mucous patches and ulcers covering the inside of the mouth, tongue, posterior nares and throat. Menses recurring every fourteen days with dysmenorrhœa, lasting frequently for one to two weeks. Leucorrhœa constant.

In this condition she began taking succus alterans (McDade) prepared by Eli Lilly & Co. (Indianapolis, Ind.), a teaspoonful three times a day, gradually increasing the dose to a tablespoonful. On the fourteenth day her condition is improved. Large watery blisters broke out in the palms of

her hands during the second week, and so of her feet, they are beginning to dessicate; the bowels act regularly daily; slight pain in the wrist and ankles after laundry work. No pain in the clavicle or head. The nodes have disappeared, as have also the mucous patches. There is one small ulcer on the inner lower lip, left side. Her appetite, general health and appearance is improving.

January 16th 1884.—Present condition of this patient is as follows: Complexion healthy; *has increased twenty-five pounds in flesh*; appetite good; says she can eat more than she ever could in her life; menstruation regular and free from pain; no leucorrhœa. The only evidence of syphilis remaining is the small ulcer on the lower lip. It heals, but breaks out again occasionally.

She has taken two and a half pints of the succus alterans (McDade). Once or twice she was without the medicine for a month at a time. It would have been better if she could have taken the medicine constantly. I have ordered her to continue the treatment for several months. I am sanguine of a perfect cure in her case.

I have never procured as satisfactory result from the old plan of treatment, and I have no apprehension of the bad consequences which so often follow the use of mercury and the iodides.

(III).—CAULOCOREA.

*Formula.**—R. Caulophyllum thalictroides.

Virburnum. { opulus.
 { prunifolium.

Aletris farinosa.

Dioscorea villosa.

Mitchella repens.

Mode of Preparation.—Pack the ingredients in a displacing vessel, the lower end of which is connected with a receiver; the top is closed with a well luted cover. Through an opening in this the vapor of alcohol is driven down through the ingredients. By this process we procure a concentrated fluid extract upon scientific principles, containing all the volatile and medicinal elements of the materials separated from the extraneous and inert matter. It is then converted into an elegant elixir, whereby the repugnant taste of the medicine is obscured, being all ready for dispensing.

Dr. I. J. M. Gan, of Georgia, in his "New Remedies," says

*We wish our worthy contributor had stated the proportions as well as the ingredients of this favorite remedy of many practitioners.—EDITORS.

of viburnum prunifolium: It has many properties in common with viburnum opulus, but differs somewhat in many respects. Both of these plants have the smell of valerianic acid, and undoubtedly contain it. Its most valuable therapeutic use is its preventive power over threatened abortion. For some twenty-five years I have used this article in cases of habitual miscarriage, and have never failed when I saw the case in time. It is a very positive remedy in after pains. It antidotes cotton-root when the latter is used to produce miscarriage. It completely neutralizes the effects of gossypium, compelling the criminal mother, however unwilling, to carry her offspring to full term. As an antispasmodic to the uterus, it removes many of those harrassing nervous symptoms that so often torment, wear down and disqualify the pregnant women for the final parturient effort. In dysmenorrhœa I have found no remedy so prompt and kindly acting as viburnum. In menorrhagia it is a very valuable remedy. The viburnum opulus has similar effects upon the female reproductive organs.

Says Dr. Line in *Mississippi Valley Medical Monthly*, of the two viburnums, their action is supposed to be somewhat similar, antispasmodic with a specific influence upon the uterus, nervine, antispasmodic, diuretic, astringent, tonic. The discovery of the medical virtues of viburnum opulus does not appear to have originated wholly with the profession, for long before any definite knowledge of its action had been published, it was a common domestic remedy in painful affections of the female generative organs. With this shrub we have had more than an ordinary experience, it having long been a favorite in a number of uterine abnormalities. In neuralgic and spasmodic dysmenorrhœa of old standing we have given it with more satisfactory results than were obtained from any other single remedy, and in case of recent development it rarely fails to effect a complete cure. Its employment in menorrhagia and metrorrhagia, although conditions markedly dissimilar to the above, has, when unaccompanied with organic disease of the uterus, proven more effectual in our hands than any other means. Intra-uterine leucorrhœa is cured by this remedy. We class viburnum opulus as a direct uterine tonic. Dr. Egan says of caulophyllum, that it is a uterine tonic of the highest order; its specific use is to give tone to the reproductive organs of the female.

Aletris farinosa is another uterine tonic not inferior to caulophyllum. Dr. D. P. Duncan, of Georgia, says, without

fear of successful contradiction, that aletris farinosa stands unrivalled as a uterine tonic. I have used it in irregular and suppressed menstruation, and have yet to see one single failure.

Says Dr. Egan, of Racine, Wis., *Dioscorea villosa* is a specific in bilious colic and allays gastro-intestinal irritation, and that *mitschella repens* exerts a direct influence upon the reproductive organs of the female, giving tone and improving functional activity. It has been extensively used as a uterine tonic to promote menstruation.

Dr. Hale says of *viburnum opulus*, it is very effective in relaxing cramps and spasms of all kinds, as asthma, hysteria, cramps of the limbs and other parts in the female, especially during pregnancy. It is highly beneficial to those who are subject to convulsions during pregnancy or at parturition, preventing the attacks entirely if used daily during the last months of gestation.

Dr. A. E. M. Purdy says that *viburnum opulus* is a powerful uterine sedative. He is satisfied that if fresh preparations of the drug be used many cases beyond the use of therapeutic aid might be relieved.

Dr. James Egan, in *Med. Brief*, Feb., 1884, says there can be no doubt of the efficacy of these remedies as evidenced by the reports of the most distinguished gentlemen of the profession, and the question arises why are these drugs not in more general use. The answer is trite: Unless combined with correctives and aromatics to disguise the vile and nauseous taste and appearance, patients cannot be induced to take them. Such is the experience of the profession generally. As a matter of fact, uterine tonics and sedatives act better when combined than when given in galenical prescriptions. Dr. J. W. Lowell, of Portland, realizing this, used a preparation efficient and, at the same time, pleasant, and has presented to the profession a combination of the best known uterine tonics and sedatives under the name of *Caulocorea*. After giving the formula, he says, "In dysmenorrhœa we have cases where the flow is both excessive and deficient in quantity. By the curative influence of *caulocorea* these two opposite conditions are alike relieved." For "pain in the back" and "headache," the above combination may be relied upon as a speedy dispeller. In many cases of prostaticorrhœa and spermatorrhœa, it has been equally successful, owing, I presume, to Hoffman's anodyne therein contained.

ART. III.—Cases of Dysentery. With remarks* by W. THORNTON PARKER, M. D., Acting Assistant Surgeon U. S. Army, Fort Union, New Mexico.

The memoranda from which these cases are copied were made without any reference to a future report, and are necessarily deficient in a multitude of particulars necessary to the completeness of a case; but all that is recorded did occur, and nothing is omitted which could invalidate the truth of the occurrences recorded.

CASE I.—A fine, healthy boy a tthree years, healthy with the exception of an occasional diarrrhœa, occasioned partly by teething, change of air, or improper food. *July 24th.*—He had been unwell three days with what his mother described as one of his usual bowel complaints. I found him in bed; countenance natural; no sign of fever or complaint of pain; has had four or five defecations. Gave Dover's powder and potassæ nitratis, which had always benefitted him before.

Fifth Day.—Defecations frequent, and on the report of the mother that the defecations were of the usual character before observed, gave rhubarb grs. iv., every two hours, with magnesia and mint water.

Sixth Day.—Marked difference in his appearance; face flushed, anxious, jactitation, weak, constant tenesmus, defecations every fifteen minutes. Was told by the mother that this new state of things commenced soon after the administration of the rhubarb mixture, and had increased—that on account of the pain it caused she had given it but twice. Found the defecations to consist of coagulated blood and mucus. Abdomen hot; anus excoriated, skin dry, thirst trifling. Gave Dover's powder gr. j. every hour; applied hot fomentations to the abdomen, and administered enemata of laudanum and starch water. In the evening a slight moisture appeared in the hands; defecations less frequent and bloody and the general aspect better. Continue Dover's powder *pro re nata*.

Seventh Day.—He had a bad night; defecations as frequent as ever; tenesmus seems aggravated by enemata; great prostration. In addition to the opiates, vegetable astringents were given, but without relief, and he died early on the morning of the eighth day of the disease—the fourth day of treatment.

*From the Record Book of the late W. THORNTON PARKER, A. M., M. D., Boston, Mass.

CASE II.—A delicate little girl æt six years; has committed no excess in eating fruit; has not been exposed to contagion nor especially to cold; has been sick three days. *July 25th.*—Countenance natural; skin dry and harsh; some little headache; bloody defecations every two hours; tenesmus not severe; tongue white; pulse 110, quick and soft. Gave Dover's powder gr. viij., magnesia gr. xv., M. and divide in five papers. S.—One every three hours. Apply warmth to feet and cold to head.

Fifth Day.—Passed a comfortable night; less tenesmus; three bloody defecations. Continue Dover's powder and gum acacia every three hours. In evening gave gtt. xxx spts. æther nitrosi.

Sixth Day.—In a fine perspiration; defecations still bloody.

Seventh Day.—Every way better; omit medicines.

Eighth Day.—Better still; gave arrowroot and gum acacia.

Ninth Day.—Ol. ricini and discharged.

CASE III.—A married lady, æt. thirty, mother of three children; now five months pregnant; has miscarried twice. She was tall, of dark complexion, and is of consumptive family, and is herself liable to bronchial affections, partly from cold taken, partly from indulging in fruit. She was attacked at three o'clock on the morning of *August 15th*, with a violent dysentery. Defecations numerous and bloody; tenesmus slight; rigors; face a little flushed; pulse 90 and soft; has occasional bearing down pains of moderate severity. Gave morphia, gr. one-sixth, pro re nata, with mucilaginous drinks. In the evening she was very comfortable.

Second Day.—Had a comfortable night until one A. M., when there was a return of pain and bloody defecations to the number of four before five o'clock A. M. At eight A. M. I found her quite easy, but weak and complaining; acidity of stomach. Gave Dover's powder and chalk $\frac{aa}{aa}$ grs. v., pro re nata. Felt bearing down pains again to day. She thinks she will abort.

Third Day.—Slept half the night; pain gradually leaving her; two defecations with trifling pain. In evening as comfortable.

Fourth Day.—Complains only of weakness.

Fifth Day.—Pain gone; defecations nearly natural.

Sixth Day.—Sitting up; feels well; defecations natural; pulse entirely normal; has considerable appetite.

Seventh Day.—She sat up yesterday in a room with a northeast exposure, without any fire in it; a northeast rain

set in and she was chilled, went to bed, but suffered severely in the night from a *return* of the dysentery. Pulse 84 and soft; restless, dispirited; has an uncomfortable feeling in abdomen; is chilly. Gave ol. ricini ζ ss. with tinct. opii, gtt. xv., *statim*, to be followed by Dover's powder grs. viij. with gum acacia, *pro re nata*; fomentations to the abdomen. She expressed great relief at the operation of the oil. In the evening she had two very natural defecations, and all disagreeable symptoms of the morning have disappeared.

Eighth Day.—Had a comfortable night; feels bright and well to-day; diet light.

Ninth Day.—As well as ever.

CASE IV.—A married lady, æt. twenty-eight, the mother of two children, exhausted by watching during the sickness of her younger child, has had bloody defecations with tenesmus two days, but has kept about the house though in a very weak and languid state. Gave her ol. ricini and tinct. opii.

Next day, *August 17th*, she was much better, and in two days more the bloody defecation and tenesmus had entirely gone.

CASE V.—A very large and stout man, æt. thirty-two; a gourmand; bilious hereditarily; says he has had this complaint before. Has not indulged in fruit; has not been where any one was sick; attributes his condition to atmospheric changes.

August 17th.—Complains of headache, nausea, pain in abdomen, acidity of stomach; pulse small and weak, tongue white; mouth aphthous; no chills; feels weak defecations every hour, with excessive tenesmus: passes in bulk half-ounce blood and mucus, attended with a scalding sensation. Gave blue pills, grs. x., to be followed in two hours by Dover's powder, grs. x., with grs. x. of pulv. cretæ comp. If there is not a free defecation before evening he is to take ol. ricini ζ j. with tinct. opii gtt. xx.

Second Day, August 18th.—Had a full defecation in evening; is every way better this A. M.—every symptom relieved.

Third Day, August 19th.—Is about his business.

August 25th.—After a week of his usual health he again caught cold and had a return of the disease with violent and increased tenesmus, and great soreness in abdomen. Gave ol. ricini with opiates, and though slow, his recovery was regular and complete in five days.

CASE VI.—A carriage painter, æt. twenty-five; robust; inclined to dissipation; "caught cold," and on the evening of

August 17th, he ate largely of melons. Next morning, had at first what seemed to be a simple diarrhœa, but which in a few hours assumed all the symptoms of a very violent dysentery. Pulse 100, small and hard; headache; chills; tenesmus very severe; bright bloody defecations, with great loss. Gave Dover's powder, grs. x., every two hours; fomentations applied to abdomen.

Next day he was better, up and about. Take ol. ricini ʒss.

August 20th.—Returned to his work.

CASE VII.—Was a very robust glass-blower, æt. thirty, always in good health; knows no reason for the present attack; had a trifling diarrhœa yesterday, for which he took a large dose of senna and salts, which aggravated it to a dysentery.

October 6th.—Pulse 80; countenance flushed; anorexia; violent tenesmus, etc. Gave full doses of Dover's powder.

Second Day.—Easier, but tenesmus continues; continue treatment.

Third Day.—Take ol. ricini; discharged; at work next day.

CASE VIII.—A delicate little girl, æt. six years, suffered, with much attendant fever, an attack of dysentery. The fever was attacked with wine of antimony and spirits of mindererus, and the tenesmus and bloody defecations with five grains of Dover's powder every four hours. The delirium and tenesmus yielded, and in six days she was running about, well as usual.

REMARKS.—The first thing to be remembered in these cases is the *few points in which they resemble* one another, either in regard to exciting cause, duration or severity; nor do they, I think, exhibit the various appearances of the disease completely. There is described by authors a typhoidal variety and a scorbutic variety, besides the idiopathic, the inflammatory, or the epidemic. These, moreover, resulting from influences, perhaps as various, complicate the character and control the treatment of any diseases, whether they be cold, obstructed perspiration, fatigue, malaria, contagion or irritating foods.

It cannot then but follow that these different causes in varying temperaments and constitutions should produce widely different symptoms, of as diverse pathological lesions, requiring the careful selection of various therapeutical means in the treatment. That this variety exists in regard to the

pathology of this disease, has been established by observation, since the time of the earliest writers who noticed its hepatic complications, while the moderns always represent these changes as varying with the type. In the cases here given, but one proved fatal, *the first*; in that no autopsy was made, as no new appearances could be anticipated.

In regard to the *treatment* employed in the different cases, it may be said that the management of the *first* was imperfect and unquestionably injurious. The mistake made, however, it is poor consolation to remark, was owing to the error of the mother, and my own want of exactness, in taking anything for granted. She had three children, and had seen them pass through a great deal of sickness; thinking her account of the nature of the defecations sufficient, I made my prescription without a personal examination of them. The result was immediate, and undoubtedly but for the rhubarb the child's life would have been prolonged if not saved.

In regard to the administration of *rhubarb in dysentery*, we have it held as an improper prescription by Cullen, and later by Eberle, who complains of the griping effects, and in Dr. Kneeland's cases* I think nothing but the smallness of the dose and the controlling influence of the Dover's powder given with it prevented a positive proof of the unfavorable influence.

In the *second* case I found the diaphoretic effect of the opium insufficient for the attendant fever; and the pleasant effect from the nitrous spirits administered at night justified its introduction among the remedies used. Whether a cancrum oris which made its appearance on the last day of her illness was owing to the neglect to employ cathartics in the early stage (as is suggested by Sydenham), or not, is a question. He says the mouth and throat are so affected "if the evacuation of the peccant matter hath been injudiciously checked by astringents, without first having been carried off by purgatives." This patient had no purgative until the last day, and then the aphthous state of the mouth was distinct.

The *third* case is remarkable for the almost complete re-

*In the first case he gave grs. ij. every three hours; in the second case he gave grs. ss. every three hours.

covery in a few days, and the as sudden return of the disease from the most trifling exposure to the cool air of the room. The pleasant relief attributed to the combination of oil and laudanum by the patient is certainly an encouragement for its use occasionally, whenever the disease becomes at all protracted.

The *fifth* case differs from the others in the distinct evidence it gives of the complication of hepatic disease, besides the active inflammation of the large intestines, as indicated by the unusual amount of tenesmus. The blue pill showed its beneficial influence quite as plainly as the opium.

The *sixth* is remarkable for the short duration and complete recovery.

In regard to the general treatment pursued in this disease, so far as any one article is concerned, I largely prefer the Dover's powder. Regarding the treatment by opiates, in the main, with an active eye to attendant complications and modifying circumstances as the best, the Dover's powder seems to bring with the opium more power to affect these different complications than any other remedy; for aside from the gently laxative effects of the potash, the ipecac combined in the preparation seems peculiarly recommended by the fact that it has been held in such high repute by competent physicians as to be thought of itself sufficient for the management of the disease in question. Such was the opinion of Surgeon Lovell, who employed it largely in the dysentery which affected the U. S. army in the "late war." I think I have seen that opium *per se* "produces," in the language of Gerhard, "bad effects." "It tends to lock up the bowels and prevent the discharge of the morbid secretions."

To obviate this, he seldom used it alone, but combined it with oil, ipecac or calomel. Such was also the opinion of Cullen. Speaking of the Dover's powder, Copeland says, "It will be found the most generally useful of all the remedial agents in the treatment of this disease, and it undoubtedly acts by determining the fluids to the external surface of the body. It is, he says, the most uniform in its action and the most easily manageable.

From what has been already said in regard to the various

nature of the exciting and predisposing causes, it would be in vain to expect even in Dover powder a specific in this disease, and in regard to *any* isolated mode of treatment, perhaps the remarks of Copeland may well be quoted when he says "great injury has resulted from a belief in specifics in dysentery, whereas experience has abundantly proved that a medicine which has proved remarkably beneficial in the treatment of the disease in one epidemic, or in one year, has entirely failed in the next, owing to a change in its type. To a neglect of this circumstance, both in this and in other diseases, may be attributed much of the skepticism of physicians as to the value of medical treatment."

The *difference of duration* in these cases, from the usual length of the disease, was the first inducement to report them: one lasted ten days; two lasted eight days; two lasted five days; two lasted three days; one lasted six days; average, five and a half.

As to the *exciting causes*, the atmosphere seemed most often at fault, "a cold" often resulting in the disease, though many had "colds" and no dysentery. Fruit was the exciting cause in only two cases.

There was in no case the least suspicion of contagion.

Original Translations.

From the French and German. By WM. C. DABNEY, M. D., Charlottesville, Va.

Prophylaxis of Tuberculosis.—Dr. Loeffler, as Chairman of a committee of seven, appointed for the purpose, has recently made a report on the prophylaxis of tuberculosis. As might be supposed, the committee accepts Koch's view as to the parasitic nature of the disease, and they recommend the following measures by way of prevention;

1. Special precautionary measures should be taken against all persons suffering from pulmonary cavities or intestinal ulcerations.

2. In the chambers the proper aeration of the room and the cleanliness of the floors, walls and furniture should be carefully attended to. It is a matter of very great importance that spittoons are always easily accessible.

3. These spittoons should contain a solution of carbolic acid of five per cent., and should be placed in various parts of the building, especially where men are in the habit of congregating, such as schools, hospitals, barracks, public buildings, etc.

4. Every object of suspicion should be submitted to disinfection. By "objects of suspicion" are meant not only the matter expectorated and the vessels in which it is received, but also all articles which come in contact with the patients. For liquids used by the patient, such as the water in which he washes, and also for all excretions, a five per cent. solution of carbolic acid should be used; the clothing should be submitted to a boiling temperature for an hour. Certain articles which cannot be treated in either of these ways may be subjected to a dry heat of 100° [centigrade] for some hours. These measures are indispensable in hospitals and in Winter health resorts where a number of phthisical patients are congregated.

5. Patients who are "far gone" in pulmonary or intestinal phthisis should be isolated, if this is practicable. Infants at the breast, whose mothers are tuberculous, should be weaned at all hazards. Delicate children should be especially looked after. For patients in whom the disease has not made as much progress, a relative degree of isolation should be sought, whether they are at home or in a hospital.

6. The crowding together in families, schools or public buildings, should by all means be prevented.

7. The marriage of a person suffering with tuberculosis should be discouraged, on account of the danger of propagating the disease either to the husband or wife, as the case might be by co-habiting, or to the children.

8. Care should be taken to avoid anything liable to cause affections, however slight, of the respiratory organs, for these affections cause a very decided predisposition to tuberculosis. Care should be taken too to prevent the stirring up of dust in the house or in the streets, or, at all events, to avoid inhaling it.

9. On account of their liability to cause catarrhal troubles about the respiratory organs, care should be taken too to avoid any of the complications of scarlet fever, whooping cough or measles.

10. The milk of cows suffering from the "pearly" disease should be considered suspicious, and when there are any tuberculous lesions on the teats it is to be interdicted absolutely. It should always be boiled before being used at

any rate, and the cattle should be under the observation of a competent veterinary surgeon.

11. The disinfection of the beds and bedding should be done in buildings of little value, erected for the purpose. (*Gazette Hebd.*, May 23d, 1884.

At a meeting of the Académie de Médecine, M. Zuber read a paper which was a review of the report of the Committee of the Vienna Medical Society, a translation of which has just been given. After referring to the fact that the question of the infectiveness of tuberculosis is now generally accepted, the author says that the question of the prophylaxis of this disease, which is now on the increase, is a very pressing one.

The great source of infection he considers to be *sputa*, and to disinfect them and destroy the germs which they contain should be the first duty of the physician. It is impossible, he says, to disinfect the dust in the streets and houses, and on this account it is the more important that the sputa should be disinfected as soon as formed. Loeffler and Gaffky have shown that a five per cent. solution of carbolic acid will do this.

It is not sufficient, however, in order to induce tuberculosis, that these dry masses of expectorated matter should gain access to the respiratory tracts. If the mucous membrane is sound and its epithelial lining in a healthy condition, and not removed at any point, no harm is apt to result; but in cases of disease of the mucous membrane, when its epithelium is removed, the little particles gain access to the tissues and thus produce tuberculosis. This, says he, Zuber, is Koch's view, and he thinks it is in accord with the teachings of clinical medicine.

The rules of prophylaxis of the Vienna Committee he thinks [very wisely] are much too cumbrous to be effective, and proposes *two* only which express in the main the views on which the circular issued to the Prussian army, August 31st, 1882, were based. They are as follows:

1. Every tuberculous patient should be furnished with a spittoon containing from fifty to a hundred grammes of a five per cent. solution of carbolic acid. The clothing and bedding should be submitted to the same disinfectant measures as that of small pox patients.

2. A tuberculous patient should not live where other human beings are assembled. At a hospital, as well as at home, he should be carefully separated from persons suffering from any pulmonary trouble (such as tracheitis, bronchi-

tis, whooping cough, typhoid fever, etc.)—(*Gazette Hebdomadaire*, May 31st, 1884.

Surgical Intervention in Vicious Consolidation of Fractured Radii.—M. Bouilly read a paper on this subject at the meeting of the Société de Chirurgie, on May 14th last. He reported three cases. In the first, the patient was seen three weeks after the accident with the well-known silver fork deformity, which, in this case, was very pronounced. On the front of the wrist there was an elevation of bone over which the median nerve passed; there was pain on pressure in the parts supplied by this nerve; impressions were received through it less promptly than under normal circumstances, and there was atrophy of the muscles of the thenar eminence, and trophic troubles. On the 26th of October, 1880, an incision was made along the tendon of the palmaris longus, and after drawing the flexor tendons to one side, a large amount of the exuberant callus was removed by the gouge and chisel. The antiseptic dressing was applied and the wound was completely cured in twenty days without the occurrence of any accident. The trophic disturbances were the first to disappear; then the patient, little by little, regained the use of his hand, and in the month of July, 1881, only a slight atrophy of the muscles of the thenar eminence remained.

M. Bouilly stated that he had recently done a precisely similar operation in an analogous case. The operation itself was perfectly successful, but too short a time had elapsed to enable him to form any opinion as to the ultimate result, so far as the functional activity of the parts involved was concerned.

Another case was in the person of a man twenty years old, who consulted M. Bouilly in July, 1883, for difficulty in moving the forearm, and especially in making such movements as pronation and supination. The patient had fallen on the wrist four weeks before; there was considerable deformity, which could not be corrected by manual operations simply, and by the advice of M. Verneuil the osteoclast of Collin was used. It took a force of 120 kilogrammes to break the bone at the seat of vicious union; the correction of the deformity was, at the time, very complete and satisfactory, but some days afterwards a very serious abscess developed. At the time M. B's paper was written, the injured limb had healed over entirely, but the result so far as the functional activity was concerned was very poor.

The third case was in the person of a little girl, nine years

old, who had suffered a fracture of the radius in its lower third three weeks before, and who had received no attention therefor. There was very great deformity, the radius at the seat of fracture presenting a very striking curve with the convexity on the dorsal surface; there was also difficulty in pronating or supinating the hand. Osteotomy was performed, and antiseptic dressing employed afterwards. The result was excellent; there was no immediate trouble from the operation, and the movements of the limb were in great measure restored.

So far as the number of cases reported permitted one to judge, M. Bouilly considered osteotomy the best method of treating these cases, which are by no means uncommon. If there was nervous compression, the operation should be done early in order to secure good results, and it should be remembered that trophic troubles disappeared slowly. M. Verneuil said that if in the region of the forearm, osteoclasty is dangerous, the manual method might with propriety be employed, and if this failed, osteotomy should be resorted to.

M. Trelat said he had in three cases removed "vicious" pieces of callus from the tibia by osteotomy, and thanks to the antiseptic method, had had no trouble in any instance.—(*Gazette Hebdomadaire*, May 23d, 1884.).

Is Corrosive Sublimate to be Preferred to Carbolic Acid as a Disinfectant in Midwifery Practice.—This is the heading of a paper in the *Central-blatt für Gynackologie*, May 7, 1884, by Dr. A. Stadtfeldt.

Encouraged by the favorable reports of Bar, Toporsky, Wiedow, Bröse, Kehrer and others, Dr. Stadtfeldt determined to give the corrosive sublimate a trial in midwifery practice.

He commenced his paper by saying that in private practice in the hands of midwives the drug is dangerous. As a matter of fact, too, the mortality of childbed has been reduced by the use of carbolic acid four or six per cent.; and while experiments have proved that the bacilli of splenic form are much more effectually destroyed by corrosive sublimate than by carbolic acid, it does not necessarily follow therefore that the former drug would be the most efficacious to prevent puerperal sepsis. The superiority of corrosive sublimate could only be utilized, too, if it could be used in routine practice without serious danger, but this he thinks is impossible. One danger, which is a real one, so far as

the nurses are concerned, is that the solution is both colorless and odorless.

Under all the circumstances, Stadtfeldt thinks that for *prophylactic* purposes, solutions of carbolic acid are far preferable to corrosive sublimate in midwifery cases.

For *curative* disinfection, he had found a solution of carbolic acid (two or three per cent.) used as an intra-uterine injection very unsatisfactory, and hence determined to try the bichloride of mercury. The solution he employed was 1 to 1500. The injections were made by careful and reliable assistants, with milk-warm solutions of the sublimate and through a glass uterine tube. As a general thing, about 1500 c. c. m. were passed through the uterus at a time, great care being taken to see that it had free egress. In six patients the results were satisfactory—more so than those obtained when carbolic acid was used. Only in a few instances were diarrhœa and slight gingivitis observed. The seventh patient with whom this treatment was pursued had required that the placenta should be removed with the hand. On the fourth day after her confinement there was a rise of temperature, the thermometer going up to 39.6° C. On the next day, the fifth after confinement, corrosive sublimate injections were used. As soon as three or four hundred grammes of the solution had been used, the patient complained of violent headache, and a feeling of constriction about the throat. The irrigation was immediately stopped; the pulse was 76; there was profuse sweating, dullness and deafness. In the evening there was considerable tenesmus and a loose action from the bowels. On the next day there were several more such actions, and some of them were mixed with blood; there was vomiting, headache and giddiness; temperature, 36.0° C. The symptoms continued till the fifth day of the illness, when complete suppression of urine came on, terminating in death.

At the autopsy there was some clear, yellowish fluid found in the peritoneal cavity. The kidneys were large, the cortical substance swollen, and containing a number of whitish points. The mucous membrane of the intestines exhibited a number of ulcerations covered with a grayish-yellow mass, and the whole of the mucous membrane was hyperæmic.

A microscopic examination showed fatty degeneration and cloudy swelling of the epithelium in the convoluted tubules of the kidneys, and also some hyaline casts.

The conclusion reached was that death was due in this case to acute poisoning by corrosive sublimate.

Analyses, Selections, etc.

Etherization by the Rectum.—This novel experiment is now attracting medical attention. Physicians so proverbially disagree, it is a wonder that some one has not before this gone to the other extreme in the administration of anæsthetics.

Dr. Axel Yversen, a Danish physician, while visiting the wards of the Hôtel Dieu, at Lyons, suggested to M. Mollière the plan of etherization by rectal absorption. Acting upon this suggestion, Mollière performed the experiment in six cases, with results satisfactory to himself, and published his observations in the March 30th number of the *Lyon Medical*. The apparatus for injecting the ether into the bowel consisted of a rectal rubber tube, connected with a flask of ether, which was immersed in water heated to a temperature of 50° C. The vapor of the boiling ether was injected into the bowel.

Mollière claims that etherization by the rectum modifies the period of excitement, regulates more accurately the quantity administered, and reduces the amount to the minimum; allows the surgeon to operate on the face without hindrance, and obviates the objection of most patients to the disagreeable odor of the ether.

The novelty of Mollière's experiment attracts attention, and his claims for its advantages are being impartially tested. The May 3d number of the *Medical Record* contains hurried accounts of twenty-five cases of etherization by the Danish method. Dr. R. F. Weir reports two cases, one of which died of hæmorrhage from the bowel. Six cases are recorded by Dr. James B. Hunter, and seventeen by Dr. W. T. Bull, surgeon to the New York Hospital, who was the first to practice this method in the city of New York. The following are extracts from his article recording his cases:

"The first 'new sensation' has been the distention of the bowel with the gas, but this has not generally been painful, nor given rise to straining. This gas has frequently escaped pretty freely beside the tube. At the expiration of three or four minutes the odor of ether has been detected in the breath. The face has then become flushed, the breathing a little slower and deeper, the patients have yawned a few times, and then, when no stage of excitement has ensued, have gradually lost consciousness, breathed stertorously, and all sensation and reflex action have been suspended.

"I have hastened to make these observations, while they are still too few and too superficial to permit any close study of this method of etherization, because of the one symptom which cannot escape observation, the diarrhœa. Seven out of seventeen patients have had loose passages, containing blood in two instances. In these seven patients the duration of the etherization has varied from ten to forty minutes, and the quantity of ether administered from three to five ounces. There has been little or no pain or tenesmus, and no constitutional disturbance accompanying this diarrhœa, which has ceased without the aid of medicine. But its occurrence in so large a proportion of these patients leads me to the conclusion that ether may be very dangerous when employed in this way, and should not be administered recklessly. In even smaller quantities than any of my patients have absorbed, it might in young or enfeebled persons, produce death from diarrhœa and collapse.

"I find that it does not suppress the period of excitement, and that, as a rule, a much longer time is required to produce complete anæsthesia than with any of the inhalers or the 'towel cone.' In several cases it has been impossible to etherize without the aid of the cone. The manipulations are likely to be disagreeable to patients, as well as to doctors, and the apparatus cumbersome. It certainly requires *less* ether, and patients are free from the disagreeable odor and the still more disagreeable sense of strangulation. It unquestionably leaves the face free for operations; but it is a dangerous irritant to the intestine.

"In view of these facts, I cannot regard the rectal method in any way as a substitute for inhalation, but I shall still consider it a valuable addition to it. To avoid the odor and strangulation one can begin with the rectal administration of a small quantity (5ss-3j), and then continue with the inhaler; and in operations on the face, this order can be reversed."

The *Boston Medical and Surgical Journal*, May 8th, contains an account of three cases, reported by Dr. Abner Post. The first suffered from diarrhœa; the second from distension of the intestines, to the extent of embarrassing respiration. However, Dr. P. took a hopeful view of the new method. He claimed that it modified the period of excitement, the vomiting and the unpleasant after effects, and entirely obviated the feeling of suffocation. The following is a footnote subsequently appended to this article:

"Further experience leads me to modify somewhat the

favorable opinion here expressed. Certain feeble individuals have taken an unusually long time to recover, insensibility has been occasionally so profound as to cause anxiety, and bloody discharges have been more frequent than is desirable."

Dr. D. R. Shute, Washington Asylum Hospital, D. C., in the *Medical Record*, June 7th, reports two cases. Diarrhœa occurred in one. In both there was distension of the abdomen to the extent of making the patients cry out with pain.

Let us now review the thirty cases so far reported. In eleven, vomiting is mentioned; in eight, more or less excitement; diarrhœa in nine; in three cases, movement of the bowels during the etherization; in three, more or less hæmorrhage from the bowels; in one, death from hæmorrhage. This analysis rather disparages the rectal method.

The only advantages of this method, so far shown, are that it obviates the sense of suffocation, of which patients often complain, and which increases the degree of excitement; spares the patient the objectionable odor of the ether; in operations on the face, puts the inhaler out of the surgeon's way; and in case of vomiting, allows the etherization to be continued.

These benefits are of little consequence, in view of its disadvantages and its dangers.

The apparatus for etherization is imperfect. The hasty invention, used by the New York physicians, consists of a graduated bottle of Squibb's ether, joined to a rubber tubing two feet long, to which is attached the vaginal nozzle of a Davidson syringe. The bottle of ether is immersed in water at a temperature varying from 120° to 140° F.; the tube passed into the bowel. The ether boils and gives off its vapor. With a rubber tube of a given size, the amount of ether forced into the intestine depends on the temperature of the ether bath. Uniform etherization, then, requires a thermometer and a supply of hot water. So far the etherization has been uncertain, some patients requiring the inhaler as well, while others are profoundly anæsthetized by the rectum. The power of absorption by the rectum varies in different persons.

The gaseous distension of the intestines, so great, in some cases, as to embarrass respiration, must surely be more disagreeable than the sense of suffocation occasioned by inhalation. A matter worthy of attention is the difficulty of withdrawing the anæsthetic, should alarming symptoms appear. Among minor objections, we may mention the inconvenience of administering to modest or obstreperous pa-

tients, the undesirable task of the assistant, and the ill-advised arrangement by which his attention is directed from the pulse and respiration of the patient.

The dangers of the rectal method, so far demonstrated, are appalling, diarrhœa in nearly one-third the cases, hæmorrhage from the bowel in ten per cent., and a fatality of three and one-third per cent.

Finally, we are led to believe that the dangers of rectal etherization largely overbalance the benefits derived therefrom; and that for purposes of anæsthesia in surgical operations, the test of further experience will relegate it among procedures rarely practiced.—*New Orleans Medical and Surgical Journal*, July, 1884.

Influence of Tobacco on Menstruation and Pregnancy.—In a report presented by Dr. J. M. Hadley, of La Grange, N. C., to the Medical Society of the State of North Carolina, and published in its *Transactions* for 1883, he says:—

As far back as 1878, when Dr. E. F. Ashe, of Wadesborough, called the attention of the profession to the serious anæmia which the use of snuff induced among women, and showed that this anæmia caused some fearful post partum hæmorrhages, the subject had become a matter of anxious thought by the profession in this State.

In an article in the *Annales de Gynecologie* by Dr. Piasecki, "on the Influence of Tobacco Manufacture on Menstruation, Pregnancy and New-Born Children," is another phase of the same subject, which will be of interest to us. Dr. Piasecki examined 540 women employed in the tobacco manufacture at Havre, with reference to the general influence of tobacco on their generative functions. His conclusions were: (1) Tobacco cannot be regarded as an emmenagogue. (2) The various labors to which the fabrication of cigars, etc., give use, produce no unfavorable influence on the work-women. (3) It has no injurious influence on pregnancy. (4) Abortions are not more common among the work-girls of the manufactory of tobacco at Havre, than among other women in town. The cigar girls, who are more sedentary in their habits, are those chiefly affected by miscarriages. (5) The mortality among the new-born children was considerable, 233 deaths in 376 births. These deaths did not depend, however, upon the employment of the mother, but upon the general unsanitary condition by which they were surrounded.

I have quoted this more because it is recent, rather than for the conviction such a paper would carry.

I think it would be a study well worth the attention to inquire into the influence which tobacco has upon menstruation, pregnancy, parturition, and the life of the infant.

Dr. Evans, of Florence, S. C., in a report to the South Carolina Board of Health, writes as follows:

"No form of using tobacco is so repugnant to every feeling of delicacy and refinement as the disgusting habit of dipping snuff, which is practiced by females belonging to the lower class of white people in the South and West. The favorite preparation of tobacco used for this purpose is Scotch snuff. These women use brushes made of small twigs, with which they rub their teeth or chew after being dipped into snuff. The mouth, teeth and lips are deeply stained with the tobacco, and, as they seldom relieve themselves of the excessive flow of saliva by spitting, a considerable quantity of snuff reaches the stomach. They jealously conceal the practice from strangers and persons whom they suppose are not addicted to the habit. It is considered almost a breach of hospitality not to provide snuff and twigs for brushes to their friends and associates when visiting their houses. The althea, on account of the facility with which its bark strips, its agreeable flavor, and the fine, white and tough fibres of the wood, is prized very much as a material for brushes. I have known this ornamental shrub to be cultivated by some families solely with a view to this use.

"Persons who take snuff in this manner for any length of time have a striking and characteristic appearance. Usually they are very thin and emaciated and the subject of marked anæmia. The feature which strikes us as the most peculiar and interesting is the discoloration of the skin. The complexion of the fairest blonde will lose its transparency and whiteness and assume a yellow tint, which in many instances deepens and becomes positively dark and swarthy. I believe, too, it has a similar effect on the color of the hair, giving it a darker hue, and at the same time rendering it dry and harsh and less glossy. These women are martyrs to dyspepsia and the neuralgias, always complaining of loss of appetite, lumps in their throats and shifting pains in every part of the body. They are great coffee-drinkers, and when they have the means to keep a supply on hand usually drink freely of it through the day. Coffee is a very good antidote to the depressing effects of tobacco, and I have no doubt these people drink it for the relief it affords them for the debility and sense of sinking from which they so often suffer. All of the baneful effects of excessive chewing are found in

an exaggerated degree in individuals who take tobacco in this way. Their children, more especially the girls, acquire the habit at an early age, usually before they enter their teens. The frail body, pallid face and pinched features contrast painfully with the plumpness and ruddy hue and glow of healthy children. The pallor of some of these children is distressing to behold; the skin is almost of marble whiteness, and there is an absence of color in the lips, and even in the tongue. The abdomen is somewhat tumid and there is some enlargement of the spleen. They are listless and quiet and sedate beyond their years; they seldom engage in play, but are content to look on from indisposition to take part and from sheer breathlessness. Finally, a sub-febrile state ensues, attended by more or less diarrhœa, which medicine is powerless to control. While the use of tobacco in this form may not be the sole cause of this profound anæmia, yet it is the prime factor in producing it, aided, perhaps, by an inherited weakness of constitution and poor and unsuitable food. The importance of preventing children from acquiring the habit of using tobacco *in any form* cannot be too strongly impressed on parents."

Care in Surgical Examination.—Dr. C. E. Nelson, of New York city, reports an amusing case in the *New England Medical Monthly*, May 15th, 1884, which shows the need of common sense in examination after an injury. He says:—

A few months since, I was sent for, in the middle of the night; after dressing and entering the cab, the young gentleman who came for me, informed the writer that a young friend of his had been shot in a fracas in a liquor saloon. Arrived at the house, the story obtained from his friends, was that he had hit a man in the teeth with his fist; then had caught hold of his coat-collar with the left hand, and fired his pistol, held close to the man with his right hand; but being very excited, and deeply under the influence of liquor, instead of shooting the other man, he shot himself in the left wrist, dorsal aspect. The police came in, and took the party off to the station-house, when an ambulance-surgeon was telegraphed for. On the arrival of the ambulance doctor, he found the man's hand swollen, especially over the head of the ring metacarpal; a bandage tied around the wrist, and blood oozing from a pistol-shot wound situated at the edge of the bandage on the wrist. The people evidently did not tell the ambulance doctor about the blow with the fist; he inserted a probe through the ball wound, then

turned the distal end of probe towards the knuckles, forcing the probe through, and crashing into the dorsal cellular tissue as far as the head of ring metacarpal, over which he thought the ball was lodged; after working the probe around for twenty minutes, the man's friends got tired of it and dismissed him; the police allowed them to take the patient to his home, thinking probably he had been sufficiently punished; they then sent for me. On my arrival the patient was lying on the bed, being stupefied with liquor, which was now exerting its influence, after the period of excitement had passed; one of the patient's friends, a doctor, strongly under the influence of liquor also, told me all I had to do was to cut down over the distal metacarpal knuckle, where the ball was "lodged;" I answered, I should first of all palpate the patient's hand, and if I felt the ball (which he thought I could not do on account of the swelling) over the knuckle, or anywhere else, I should certainly incise; but, if I did *not* feel a ball, would use my own judgment as to the best course to pursue. I palpated, and felt no ball; then said, "Take the bandage off the wrist," this was done. "What is *this* hole?"

Answer. "Where the ball entered."

Question. "What is *that* hole?"

The people looked amazed. In the hurry and excitement of the moment the wrist had been tied up, and the second orifice had not been observed. I then said, "The pistol-ball is not in the patient's hand or arm, but somewhere in the saloon." A severe cellulitis had been lit up in the patient's hand, which lasted for more than two weeks; the cellulitis was caused by the probing of the ambulance doctor. The track of the ball, across the back of the wrist, which was quite an independent matter, healed in a little while.

Hay Fever—Its Successful Treatment.—At a recent meeting of the American Laryngological Association, Dr. C. E. Sajous read a paper on this subject.

His conclusions were as follows:—

First. There is an idiosyncrasy existing in certain individuals to become influenced by certain emanations or irritating substances.

Second. The idiosyncrasy is accompanied by a chronic hyperæsthesia of that part of the nasal mucous membrane covering the inferior and middle turbinated bones, the middle meatus, the floor of the nose and that part of the septum between the limits of the olfactory membrane.

Third. Organic alteration of these parts annuls that hyper-

æsthesia; preventing at the same time what symptoms the patient may be liable to in case of an access.

Fourth. Any destructive agent will induce that organic alteration, but the galvano-cautery is by far the best; being painless, effective, and devoid of all danger when used in practiced hands.

Fifth. In order to obtain a satisfactory result, a sufficient number of applications must be made, covering the entire extent of the hyper-sensitive surface; without which the result will be doubtful.

Until after he had completed this paper, Dr. Sajous said, he had been entirely unacquainted with the labors of Dr. Roe in the same direction, as set forth in the papers which he had read before the Medical Society of the State of New York in 1883 and 1884; in which he claimed that the essential subjective cause of hay fever was found in the nasal passages, having been induced by disease, either latent or active; that the objective cause of the irritation of this tissue was mainly pollen; that a cure could be effected by the destruction of the nerve-filaments and enlarged vessels of the part; and that the latter could most satisfactorily be accomplished by the galvano-cautery. If he could not be the first, therefore, Dr. Sajous was glad to be a good second in this matter, and he felt gratified that his conclusions had been confirmed by the more extensive experience of Dr. Roe, who had commenced his present plan of treatment as long ago as 1879, and therefore anticipated him by two years.

In advocating the theory of special idiosyncrasy he did not wish, by any means, to ignore that of reflex centres. Practically they were one and the same thing. The exposed surface in every case was the nasal mucous membrane, but if there were no hyperæsthesia here, there might be in other parts of the body, as the vagina, for instance. The hyperæsthetic condition of the nose was particularly sensitive to pollen, and, therefore, the latter was one of the most common exciting causes, and dust was very apt to act in the same way in the case of those who were not affected by pollen.—*College and Clinical Record*, July, 1884.

Palatable Prescriptions.—In the *Cincinnati Lancet and Clinic*, May 3, 1884, Dr. John L. Davis has an interesting and practical article upon this subject, from which we take the following:

It is with the view of suggesting agreeable and appropriate vehicles for some of the most repulsive drugs, that I offer the following prescriptions to which I ask your atten-

tion. They are the result of a great many experiments, and most of them I have used in practice, and can recommend as the best combinations possible without modifying the drug in such a way as to affect its action. I have attempted to marshal these unruly drugs under something approaching order; though I confess the classification is far from being a perfect one. A few drugs of each class will suffice to illustrate how the whole class may be improved.

1. *Bitter Drugs*.—These comprise a very large class of unpalatable medicines, the climax of bitterness being reached in the cinchona bark. The best prescription for masking the taste of quinine is—

R̄.	Quiniæ sulphatis.....	gr. xxx.
	Tinct. aurant. cort. recentis.....	℥ ij.
	Ext. glycyrrhizæ fl.....	℥ vi.
	Syr. simplicis.....	℥ i.

Or it may be given with the aromatic syrup of licorice. Simply chewing a piece of licorice root before and after taking the quinine will very effectually hide its bitter taste. The same methods for administration apply equally well to most other bitter medicines. In the *American Journal of Medical Science* (1878) Dr. Samuel Ashhurst, of Philadelphia, describes an agreeable method for the exhibition of cinchonia. He uses the alkaloid rather than the more usual sulphate; for while being equally soluble in the stomach it is less so in the saliva, and consequently its bitterness is less marked than that of the sulphate. His prescription is:

R̄.	Cinchoniæ.....	gr. i.
	Sac. lactis.....	gr. iv.
	Natr. bicarbonatis	gr. 1-10.

The soda renders the alkaloid less soluble in the mouth, while the sugar of milk gives it an agreeable, sweet taste. Children take this powder without the least aversion.

The thick, viscid elixir of taraxacum is also a valuable vehicle for the administration of medicines. And finally it may be said of these as of all medicines that if taken very cold, or if a piece of ice is taken into the mouth immediately before the medicine the objectionable taste will be less marked.

2. *Salty and Metallic Drugs*.—A large class of unpalatable drugs is included under this head. The best prescription containing iodide of potassium is the following:

R̄.	Potassii iodidi.....	℥ ij.
	Tinct. aurant. cort. recentis.....	℥ ij.
	Ext. glycyrrhiz. rad. fl.	℥ i.
	Syr. simplicis.....	℥ s. ad. ℥ ij.

Of this each teaspoonful contains five grains, and the iodide is so perfectly disguised that persons who have been accustomed to its use fail to recognize its presence. For this combination I am indebted to Mr. Julius H. Eichberg, the skillful and efficient druggist of the Cincinnati Hospital. The vehicle is eligible also for the administration of the bromide of potassium. A syrup of coffee is highly recommended to hide the taste of the iodide—fifteen grains to the ounce. The same vehicle can be used for the bromide, except in cases where the stimulant effect of coffee is to be avoided.

A simple and somewhat effective way for administering the iodide and bromide as well as salicylic acid is in milk—ten grains to the ounce. Another mode for giving these drugs is to use as the vehicle, slightly alkaline, carbonated water, either natural or artificial. This plan was proposed by Dr. Seguin (*New Remedies*, 1883, 195).

The syrup of the iodide of iron is a useful medicine which is best given simply with the fluid extract of licorice root; this is preferable to the ordinary *succus glycyrrhizæ*. A medicine peculiarly disagreeable to many persons from its bitter, salty taste is magnesium sulphate. The following prescription offers an elegant means for its administration:

R. Magnesii sulphatis.....5 ij.
 Acidi sulphurici.....gtt. v.
 Glycerinæ.....
 Aquæ.....aa. ʒ i.

Half of this in a glass of water constitutes an agreeable dose of an ordinarily repulsive substance. By the addition of a drop or two of mint the mixture becomes not only palatable but attractive.

3. *Astringent Drugs*.—Tannin is the representative of a class of remedies repulsive by reason of an astringent, acid taste. This may be materially improved by the addition of sugar of milk and aromatic powder. I have also ordered it with powdered licorice, which materially improves the taste. Salicylic acid may be given in powder the same way. When alcohol is not objectionable the following combination will be found useful and agreeable:

R. Acidi salicylici.....gr. viij.
 Spir. vini gallici.....m. xl.
 Syr. acaciæ.....
 Syr. limonis.....aa. m. x.

Chloral besides having an acrid taste is burning and penetrating; and these qualities make it a most difficult substance to disguise. I have seen some alleged palatable prescriptions of this drug, in which the only thing disguised and perfectly hidden was the aromatic vehicle, the taste of the chloral being apparently re-enforced and concentrated. The best combination containing this drug is a suggestion of Mr. Eichberg. It is this:

R_y. Chloral hydratis.....gr. v.
Glycerinæ..... $\bar{5}$ i.

Or, it may be still farther improved, thus:

R_y. Chloral hydratis.....gr. xx.
Glycerinæ..... $\bar{5}$ ij.
Ext. glycyrrhiz. rad. fl..... $\bar{5}$ i.

Each drachm of which contains six and two-thirds grains of chloral. These same vehicles may be used in giving croton chloral hydrate, a remedy which is remarkably beneficial in some cases of facial neuralgia.

Another convenient and agreeable vehicle is syrup of raspberry, a drachm of which covers the taste of three or four grains of chloral.

4. *Etherial Drugs*.—The syrup of raspberry is also valuable to conceal the disagreeable character of sweet spirits of nitre; when taken with this syrup in soda water the drug is not tasted.

Sulphuric ether is best given on a lump of sugar; chloroform has a hot burning taste, which is best modified by an emulsion; or it may be given with a large quantity of simple elixir.

- 5. *Odorous Drugs*.—A certain class of drugs is disagreeable more from odor than from taste. Such are carbolic acid and creosote, very repulsive to some persons. The unpleasant character of the former is fairly hidden by simple elixir, five grains of the acid to the ounce. The best way to give creosote is with simple elixir or syrup and madeira wine.

Iodoform has a very objectionable odor, and one method for disguising it is the addition of tannin. The compound has a less disagreeable odor than iodoform, but this improvement is made by destroying the iodoform by the formation of a different substance. Such prescriptions of course are improper. The offensive odor may be removed by the addition of various substances, without affecting in the slightest the physiological action of the drug. The best combinations are the following:

R.	Iodoformi.....	℥ i.
	Nitro benzol.....	gtt. iij.
R.	Iodoformi.....	℥ i.
	Ol. myristicæ.....	gtt. ij.
R.	Iodoformi.....	℥ i.
	Eucalyptol.....	gtt. iv.

All of these prescriptions are excellent; the disagreeable odor is perfectly removed, while the properties of the iodoform remain unaltered. Some samples of these combinations prepared two years ago show as yet no trace of the odor of iodoform, though the activity of the drug is unimpaired. The odor may also be hidden, though less effectually, by oleum myrciæ (oil of bay) and tonka bean, or its active principle, cumerine.

Nitro-benzol constitutes an agreeable cover for the odor of turpentine. The following is a prescription which I have used:

R.	Ol. terebinthinæ.....	m x.
	Syr. simp.....	
	Mucilage acaciæ.....	aa m xxv.
	Nitro-benzol.....	gtt. i.

In some cases turpentine may be best given in pill form. And the same may be said of many of the resins and gums.

Assafoetida is a substance which the Persians use as a condiment, to give their food a pleasant taste. Personally I should prefer to take it in a gelatine coated pill, which is the least disagreeable method for its administration.

Given in liquid form, it is an exceedingly repulsive drug, whose odor and taste can not be effectually covered. By the addition to the tincture of a drop or two of oil of orange, and a few drops of aromatic sulphuric acid to the dose, its nauseousness becomes slightly less obtrusive. This is somewhat preferable—if there can be a choice in repulsive things—to the ordinary emulsions, and mixtures containing licorice, tincture of orange, mint, etc.

Ipecac has a repulsive, acrid taste, even as a syrup. If, however, instead of sugar, glycerine is used in making the syrupy mixture, the objectionable features are materially improved.

6. *Oils*.—Such oils as that of copaiba are best given in capsule. But some persons are so constituted as to be unable to swallow capsules, and for such our only refuge is found in emulsions, such as that of bitter almonds flavored with an essential oil.

Castor oil is most easily given with an equal amount of glycerine, and a drop of oil of cinnamon to the ounce. The oil is not recognizable, and the mixture has only the hot, sweet taste of glycerine, agreeably modified by cinnamon. This is the best way to give this valuable medicine to children. It is also readily taken by children when mixed with coarse brown sugar, and having the mass made firm by placing it for a few minutes on ice (*Berl. Klin. Wochen.*).

A method for its exhibition suggested by Dr. Potain (*Le Practicien*), appears to answer the purpose. A spoonful of orange juice is poured into a cup, then the oil is added, and finally another spoonful of orange juice. When swallowed, the presence of the oil is completely unrecognizable.

By far the simplest and most eligible palatable prescription containing castor oil is that made with the addition of glycerine, with or without cinnamon.

A very nauseating and unpalatable medicine is cod-liver oil. Many attempts have been made to cover its taste. One of the easiest methods for its administration is with the yolk of an egg, a drop or two of an essential oil, and half a glass of sweetened water; or it may be given with glycerine and whiskey, or glycerine and compound spirits of lavender. The oil may be much modified, and, to some tastes, improved, by the addition of ten drops of the tincture of eucalyptus globulus to the ounce.

The medicines I have mentioned are those ordinarily most difficult to administer. I have spoken of them as we have them, without attempting any other improvement than can be made by the addition of various substances. But in most instances our medicines may be made still more agreeable by concentration, and by the use of the active principle, as the alkaloids of drugs.

Sublimate Solutions in Diphtheria.—Dr. Rudolph Caeestatt, of Uruguay, writes to the *Münchener Intellig. Blatt*, March, 1884, in favor of the treatment of diphtheria by local applications of solution of perchloride of mercury, 1 in 10,000, about gram to the pint. The plan he follows is to sprinkle the floor of the patient's room five or six times a day with a two and a-half per cent. solution of carbolic acid, and paint the part affected every hour with the sublimate solution, using a fresh brush or feather each time. For the purpose of quieting the patient after such frequent disturbances, he gives chloral in larger or smaller doses. He has had no fatal cases since adopting this plan of treatment.—*Med. Press.*

Cholecystotomy.—We abstract the following interesting article from the *Weekly Medical Review*, June 7th, 1884:

Dr. W. Lawson Tait, of Birmingham, Eng., has performed the above operation thirteen times, with recovery in every case. He performed the first successful operation of the kind in 1879, upon a patient who is still living, as indeed are all his other cases except two. In his note on the subject in the *British Medical Review*, May 3d, 1884, he pays the very highest compliment to the late Dr. Marion Sims. Speaking of the remaining eleven cases, he says: They are in perfect health, and the results are perfect with one exception, and that exception has taught me a great deal.

It has, in the first place, satisfied me that my much lamented friend, Dr. Marion Sims, laid down principles from which we are not likely to depart with any advantage, and that he practically perfected this operation, though he did not meet with a successful result in his own case.

Two modifications of the proceedings as advised by him have been suggested and have been put in practice, but they are not based on good reasoning, and have not been successful in practice. The first is a proposal made, I believe, by Sir Spencer Wells, to open the gall-bladder, remove the calculi, and to close it by a continuous suture without attaching it to the abdominal wound. So far as I know, this has been put in practice only once, and the result was fatal. A large quantity of bile was found in the peritoneum; and though this may not have been the cause of death, it is clearly a condition which is unlikely to contribute to success.

But the arguments against this proceeding are much stronger than the mere want of success in a single case. The gall-bladder is an organ subject to periodic filling and emptying, the latter process being accomplished by the contraction of its muscular walls, and this contraction is far more powerful than seems to be believed by any author I have consulted on this point. It also secretes an abundant quantity of clear albuminous fluid from its mucous surface, and this fluid contains—if I may make a conclusion from the few rough experiments I have made on the subject—some kind of ferment. Even if no bile enter the gall-bladder, it speedily fills with this secretion and expels it; so that, if its duct were occupied by a calculus, and a wound in its base were closed by a continuous suture, and not fastened to the abdominal wall, as recommended by Sir Spencer Wells, it is difficult to believe that such wound would remain closed.

It is a matter of extreme difficulty—in fact, I may say it

is impossible during the operation of cholecystotomy—to be quite certain that all the stones are removed from the duct. This canal is distended by the passage of a calculus, urged forward by the pressure of the secretion of mucus by the gall-bladder itself. So long as the stone is in the cystic duct, the contents of the distended gall-bladder consist entirely of this clear mucus. After the stone has passed the mouth of the liver-duct, the bile flows into the gall-bladder, its passage into the duodenum is prevented, it is reabsorbed into the system and jaundice is produced. The cystic duct, in its normal state, is of much smaller diameter than the common duct, and the agonizing pain of the passage of a gall-stone seems to be limited, in great measure, to this part of its journey, for it is rare, after these severe attacks, that jaundice occurs. After mild attacks jaundice occurs sometimes, and this indicates that the stone is passing, or has passed, through the common duct.

This leads me to say that, should cholecystotomy be performed while a stone is in the common duct, and the gall-bladder treated as recommended by Sir Spencer Wells, it is clear that the pressure required to force the stone into the duodenum would be much greater than that required to tear open the stitched wound in the gall-bladder; extravasation of bile into the peritoneum ever afterwards would be inevitable.

Exactly the same argument is to be urged with still greater force against Langenbuch's proposal to remove the gall-bladder. The proposal is intrinsically absurd, for there can be no reason for removing any bladder merely because it has some stones in it. In many (five) of my cases the bladder was suppurating and greatly thickened, but the removal of the stones and the drainage of the bladder for a few weeks completely cured this condition. If the gall-bladder were removed at the time that a stone was lodged in the common duct, the bile must all flow, just as in the other case, into the peritoneum. I understand that Langenbuch's proceeding has been fatal in three out of six cases, where it is known to have been tried. It would have been fatal in three of my own cases if I had employed it, for in three of them stones were thus situated. In two I got the stones out, and in the third the stone is still there. Every drop of bile comes through the fistula, and not any appears to go through the intestines. The fistula is a mere pin-hole, and I have tried to close it three times, always with the result of bringing on an agonizing colic which lasts till the bile forces its way out

through the fistula. This takes about fifty hours. It is clear I shall not succeed in this way, and I propose to open the abdomen again, about an inch to the inner side of the gall-bladder, and crush the stone *in situ* by means of padded forceps applied outside the duct. If a better plan should occur to any of my readers I should be glad to have it, and if it should be practicable and successful, its originator shall have full credit for the suggestion.

Whilst watching these interesting cases of biliary fistula, I have read much of the literature of investigations concerning the function of the bile, and I have been greatly amused to see how utterly futile experiments on animals have been in settling even the most elementary facts of the influence and the uses of the human bile. Thus I have not seen the slightest evidence to believe that either quantity or quality of food, or any drugs which were used for the legitimate treatment of these cases, as morphia, calomel, podophyllin, and rhubarb, have the slightest effect on the quantity or character of the secretions. None of the patients have suffered in any way when even the whole secretion has come through the fistula, in one case for months, save from the inconvenience of the dribbling. Indeed, in a case still under observation, the patient has positively gained in weight, and has greatly improved in health. The stools are almost milk-white, and there is not the slightest evidence of the flatulence and decomposition which is said in the text-books to be the result of biliary fistula.

The Existence of a Thermic Centre, supposed to have its seat in the medulla oblongata, under the floor of the fourth ventricle, seems to be rendered more probable by a clinical observation, the only one, to our knowledge, extant, in which the post-mortem revealed a lesion in the region mentioned.

A patient suffering from chronic alcoholism, and having, besides, the symptoms of bulbar paralysis, first: Complete anæsthesia and difficult respiration, which was succeeded by the Stokes-Cheyne symptoms, showed the temperature of 73° F. in and during the last days of his disease.

On post-mortem examination a focus of softening was found in the region indicated above.

It is questionable, moreover, whether the lowering of the temperature was really due to the destruction of the supposed centre, or to the continued alcoholic excesses and concomitant inanition. At all events, a temperature of 70° F. is something very uncommon.

Book Notices, &c.

Sexual Neurasthenia, with a Chapter on Diet for the Nervous.

By GEORGE M. BEARD, A. M., M. D., Formerly Lecturer on Nervous Diseases in the University of the City of New York, etc. Edited by A. D. ROCKWELL, A. M., M. D., Electro-Therapeutist to the New York State Woman's Hospital, etc. New York. E. B. Treat. 1884. 12mo. Pp. 270. Cloth. Price, \$2. (From publishers.)

This book has been published from a posthumous manuscript, and has been carefully edited by Dr. Rockwell, who for many years was associated with Dr. Beard in daily practice. Dr. Rockwell states that he found the manuscript so nearly ready for the publisher that he had little else to do than to fill up a few gaps, and to arrange the chapters for the printer's hand.

Much of this book is but a limitation of the author's views, as expressed in his work on "American Nervousness," to the special subject in hand, with an amplification of his views stated in the latter-named volume so far as relates to nervous exhaustion resulting from some disorder of the sexual organs in the male and female.

After some sixty pages of definitions, causes of nervous exhaustion in general, etc., Dr. Beard lays down the general proposition "that, in the strong, functional excess produces *local* functional disease, and in the nervous, general functional *nervous* disease." Beginning with this generally correct proposition, he proceeds to apply the suggestion to excesses which impair the sexual functions and explains why some are affected by much less activity than others. He makes unthought of remarks as to the relation of sexual neurasthenia to certain other diseases—such as epilepsy, neuralgia, hay-fever, inebriety, rheumatism, gout, etc. He next proceeds to discuss sexual hygiene—as to normal nocturnal emissions, masturbation, sexual intercourse, etc.—in a sensible and instructive manner. The chapter on treatment is full of excellent advice.

PAMPHLETS, REPRINTS, ETC., RECEIVED for which we have no room for fuller notice, etc.; but most of which can be obtained by enclosing a letter stamp for postage to the respective authors named.

Morbid Drowsiness and Somnolence. By C. L. DANA, M. D. New York. [This is a pamphlet of 24 pages, with an Appendix of four pages, reprinted from *Journal of Nervous*

and Mental Diseases, April, 1884. It is an important "contribution to the pathology of sleep," and contains reports of some remarkable cases, which are systematically divided into five classes.]

A Glioma of the Right Eye Spreading by Metastasis through many Periosteal Centres. By JULIAN J. CHISOLM, M. D., Baltimore, Md. [A case, almost unique, illustrated by a wood cut, in six pages of *Archives of Ophthalmology*, January, 1884, well reported by the distinguished Professor of Eye and Ear Diseases in the University of Maryland.]

Advances in Antiseptic Medicine and Surgery. By S. S. SATCHWELL, M. D., Pender county, N. C. [In this report, read before the Medical Society of North Carolina, 1884, the author takes special occasion to give due credit to Dr. Otis F. Manson, of this city, for his original discoveries of some of the therapeutic virtues of quinine. The paper is a good review of the subject named in the title, and covers 23 pages.]

Duputren's Finger-Contraction: Its Nervous Origin. By ROBERT ABBE, M. D., New York City. [This lately discussed deformity of the hand, which rarely appears before thirty or forty years of life, receives, at the hands of the author, an excellent review in an article published in the *New York Medical Journal* for April 19th and 26th, 1884. He presents some remarkable cases in this duodecimo pamphlet of 25 pages. Every hasty writer falls into errors of language, but the study of the subject is herein presented for the good of students and writers.]

Some Recent Theories Regarding the Pathogeny of Sympathetic Ophthalmia, Viewed from a Macroscopic Standpoint. By SAMUEL THEOBALD, M. D., Baltimore, Md. [This reprint of 21 octavo pages from the *Archives of Ophthalmology*, No. 1, 1884, presents the idea that sympathetic ophthalmia progresses from optic neuritis of the other side is not supported by facts. Literature and experience have taught us to extract the injured eye—especially if inserviceable. If we are in practical error, as we have to deal with our patients, we are glad to be shown that we are, and will gladly state the fact to the public.]

One Hundredth Anniversary of the Foundation of the Medical School of Harvard University, an octavo pamphlet of 55 pages, neatly printed on fine paper, and containing illustrations of the Medical School, 1883; Holden Chapel, 1783; Massachusetts Medical College, 1815, and Harvard Medical School, 1846, will prove of special interest to all

of the students of this famous institution. The memorable address by Dr. Oliver Wendell Holmes occupies 33 pages. The other pages are taken up specially with the address of President Elliott and the pleasurable proceedings of the occasion, with an appendix by Dr. Holmes, appealing for additional professorship endowments.

Congenital Lipoma. By A. JACOBI, M. D., New York City. [This octavo reprint from *Archives of Pediatrics*, February, 1884, in the author's terse style, reviews the subject quite fully, so far as German literature is concerned, and adds four cases of his own. He shows that congenital lipoma is rare. It is a useful paper—perhaps somewhat too dogmatic in his statement of evidence and conviction.]

Galvanization and the Continuous Current. Dr. PALMER. [Pretty much an advertising circular of 36 pages that has been mislaid in our drawer for notice.]

Iodoform in Dental Surgery. By C. F. W. BODEKER, D. D. S., M. D. S., New York. [A reprint of 12 octavo pages from *Independent Practitioner* for March and April, 1884. It shows that iodoform is a valuable remedy for pulpless teeth and in the treatment and capping of exposed pulps. The paper bears the marks of study on the part of the writer and of value to the dental surgeon.]

Fractures of the Neck of the Femur, with Special Reference to Bony Union after Intra-Capsular Fracture. By R. SENN, M. D., Milwaukee, Wis. Extracted from the Transactions of the American Surgical Association, Vol. 1, 1883. 8vo. Pp. 113. [If our space allowed, we would give this extremely valuable paper from an eminent surgeon a more extended notice. To indicate his research, he notes the case of Dr. Wm. Selden, of Norfolk, Va., published in the *Transactions of the Medical Society of Virginia*, 1877, in a full list of about fifty cases reported.]

Editorial.

Urinary Test-Papers and Apparatus.—We are indebted to the courtesy of Messrs. Parke, Davis & Co., of Detroit, for a case of special utility to the general practitioner. It is a neatly bound *pocket-case*, containing a graduated minin dropper, a graduated test-tube, an ordinary test-tube and a set of six specific gravity beads. In an ingeniously arranged

paper-holder suited to the case are a number of test-papers, such as litmus, potassium ferrocyanide, sodium tungstate, citric acid, potassium-mercuric iodide, picric acid, sodium carbonate and indigo. A pamphlet that is enclosed in each case gives specific directions to the manner of using the apparatus and the plan to be followed in making examinations of urine. The special advantage of this case over any other arrangement we have ever seen is that every thing is ready at the physician's hand for urinalysis at the patient's bedside. The examination, therefore, need occupy only a few moments of time, and the preparations are so complete as not to permit of offensive odors, nor can the most sensitively modest be made to blush in witnessing the steps taken in the examination. The reagents, with which the slips of paper are saturated, are all of the purest chemical quality. We hazard nothing in the statement that, as soon as examined, the practitioner will feel that such a package, fitted to the coat-pocket and ready for bed-side urinalysis, is exactly one of the very things he has long been wishing for. The price is very moderate. A full set of the paper-tests, etc., cost only fifty cents. We commend them to the attention of the busy practitioner unreservedly.

The New Orleans Medical and Surgical Journal begins its twelfth volume (July, 1884,) under a new editorial management. It consists of ten Associate Editors, including a portion of the old staff. This well-established journal deserves the support of the profession. It always contains something of interest—especially to the Southern practitioner.

Gross Professorship of Pathological Anatomy.—The Alumni Association of Jefferson Medical College have issued an appeal to the profession at large to assist the graduates of that institution in establishing a memorial professorship, to be designated the S. D. Gross Professorship of Pathological Anatomy. In furtherance of that object it is requested that all who desire to show their appreciation of the life-long service given to American surgery by Prof. Gross, should contribute something from their means to secure the fund required. All contributions may be sent to Dr. R. J. Dunglison, lock box 1274, Philadelphia P. O., and will be acknowledged in the columns of the *Medical News*. It has not as yet been decided in which medical school the professorship will be established, but it seems eminently proper that it should be in that college where the noted surgeon spent

so many years of his busy life. We note the fact of an error in the published list of the auxillary committee, the name of one of the members from Virginia being printed as Dr. T. J. Cullen, of Petersburg. This is probably intended for Dr. J. H. Claiborne, of that city. We look for a quick and hearty response to this appeal.

American Public Health Association.—The Twelfth Annual Session will convene in St. Louis, Mo., Tuesday, October 4th, 1884, and will remain in session four days. All papers intended for this session should be in the hands of the Secretary, Dr. Irving A. Watson, Concord, N. H., at least three days prior to the meeting. After October 1st, all papers intended for him should be sent to St. Louis, care of Dr. Jos. Spiegelhalter. Dr. A. L. Gihon, U. S. N., Washington, D. C., is President of the Association. Arrangements are being perfected to make this the largest and most interesting meeting ever held. The following topics will receive special consideration: (1) Hygiene of the Habitations of the Poor; (2) Hygiene of Occupations; (3) School Hygiene; (4) Adulteration of Food; (5) Water Pollution; (6) Disposal of Sewerage by Irrigation or Chemical Action; (7) Observable Effect upon Public Health of Official Sanitary Supervision, and (8) The Work of Municipal and State Boards of Health.

Texas Medical Bill.—We acknowledge receipt of a copy of the "Bill to Regulate the Practice of Medicine in the State of Texas," which will be presented to the next Legislature of that State, and we trust passed.

It was framed by Dr. F. E. Daniels, the enterprising senior editor of one of our brightest exchanges—the *Texas Courier-Record of Medicine*. The bill in its main features resembles somewhat the bill passed for the same purpose by our last Legislature, examination of candidates being held in each Congressional District by a Board of Censors.

These Boards are to be composed of physicians whose names shall be presented to the Governor of the State by the Texas State Medical Association, and his appointments must be confirmed by the Senate. It is a most excellent bill, and reflects great credit upon its author, Dr. Daniels.

"**Lal**" is the title of a novel by Dr. Wm. A. Hammond, which is being issued this month by Messrs. D. Appleton & Co., of New York city.

Membership in the American Medical Association.—We are informed by a circular from the Permanent Secretary, Dr. Wm. B. Atkinson, of Philadelphia, that at the meeting of the Association held at Washington in May last, an Amendment to Regulation II. was adopted, which provides that—

Membership in the Association shall be obtainable by any member of a State or County Medical Society recognized by the Association, upon application endorsed by the President and Secretary of said Society; and shall be retained so long as he shall remain in good standing in his local Society, and shall pay his annual dues to the Association.

As far as such opportunities are embraced, the strength of the Association will be increased and consolidated, so as to unite the profession, and give it a force and influence not otherwise attainable. As the new departure has been taken, it is for the Association and its constituent bodies to carry it out to the fullest extent, and to give the movement their hearty co-operation. Toward this end, the first step is to make the action of the Association as widely known as possible.

Applications for membership, in the manner specified above, accompanied with five dollars for annual dues, should be sent directly to the Treasurer, Dr. Richard J. Dunglison, lock box 1274, Philadelphia, Pa.; on receipt of which the weekly *Journal of the American Medical Association* will be forwarded for one year to such member.

Obituary Record.

Dr. Willard Parker, Emeritus Professor of Surgery in the College of Physicians and Surgeons of New York, died last month at the advanced age of eighty-three years—having been born in New Hampshire during the latter part of 1800. He was elected Professor of Surgery in 1839, which position, after thirty years of able and eminent labor, he resigned in 1879. Pure as to his private life he was a philanthropist in his public relationships as a citizen. As an earnest student of his profession, he won the laurels that crown the able surgeon. His memory will not be lost, for his contributions of pen and speech have made lasting impressions upon the medical world.

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Original Communications.

ART. I.—**Excision of the Uterine Appendages for the Relief of Various Otherwise Incurable Diseases.*** By REUBEN A. VANCE, M. D., Cleveland, Ohio.

In judging any surgical procedure, the experienced practitioner takes as his guide the actions of nature, and estimates the perfections of surgical art by the thoroughness with which nature's processes are imitated, and nature's ends anticipated. The main vessels of an extremity are suddenly closed and a portion of the limb dies; here nature forms a line of demarcation, and sooner or later casts off the dead part. The surgeon, by studying the details of this procedure, discovers that art can interfere to the advantage of the patient by at once removing the limb so soon as nature points out the junction between living and dead tissues—that by so doing the disease is shortened, pain mitigated and danger avoided. The student of joint diseases observes that violent spasm of the muscles about the diseased articulation plays a very important part in the pathological phenomena noted: That effusions into and about the joint, separation of the cartilage, destruction of the articular lamella and disintegration of the opposed osseous surfaces, as also the starting pains and constitutional implication, are in great degree

*Read before the North Central Ohio Medical Society, Ashland, Ohio, 1884.

owing to the irregular action of the neighboring voluntary muscles and the consequent attrition of the diseased articular surfaces. Let the surgeon follow the indications of nature and do that which in this case nature is unable to accomplish: Fix the limb firmly so that motion can no longer occur at the joint, and at once the muscles will relax, pain cease and the deformity disappear. By taking this step the surgeon not only affords temporary relief, but by continuing the fixation, nature is enabled to do what before was impossible—to effect a cure.

The various inlets and outlets of the body are so endowed that, although exquisitely sensitive, they are not irritated by contact with the solids or fluids which, in accordance with their functional office, pass over their surfaces. The urine traverses the ureters, is stored in the bladder, and at intervals is discharged through the urethra without harming any part of the urinary apparatus. The feces, lodged in the cæcum and sigmoid flexure, are voided through the rectum at regular intervals, and neither their retention nor their discharge injures the terminal portion of the large intestine. Food and drink are transmitted to their destination without disturbing either the œsophagus or the stomach. Air passes into and out of the lungs without the consciousness of the individual being aroused by the act. None of these acts are disagreeable; on the contrary, certain of them are attended by sensations of comfort. It seems as if the nervous endowments of the various mucous membranes are of such a character as to render the parts insensible to the acrid qualities of the ingesta or egesta peculiar to each canal. Permit a drop of water or a crumb of bread to pass from the pharynx into the larynx, and there is no lack of decided evidence that even in health the materials unnoticed in the one are violent irritants in the other. Pure water in the nasal passages excites distress; salt water in the pharynx produces nausea; reverse the order, force the saline fluid up the nose and gargle the throat with pure water, and no disagreeable sensation is experienced. In health the inlets and outlets of the body are so constructed that the special materials designed to traverse them can do so without distress, provided the ingesta and

egesta keep their proper channels. Let disease manifest itself in the walls of one of these canals and instantly the faculty is lost, and even the blandest articles become irritating. When disease is once initiated we not infrequently see it perpetuated by the irritation produced by contact with the materials traversing the canal. Ulcers of the pharynx are thus made worse by contact with the food; lesions of the larynx, by the air; diseases of the urethra, by the urine, etc.

The influence of the ingesta and the egesta upon disease located in any of the canals leading into or out of the body is now so well known that surgical aid is not infrequently invoked to make a new channel for these materials in order that they may no longer pass over and irritate the diseased part. Certain ulcers of the larynx will resist all treatment until tracheotomy opens a new channel for the air. As soon as this operation is performed and the irritation due to currents of air is done away with, the ulcer heals. Similar lesions in the œsophagus persist until gastrotomy opens a way for food and drink directly into the stomach. Many years since Mr. Cock, of London, demonstrated that the mere formation of a new outlet for the urine sufficed for the cure of certain chronic affections of the urethra; that as soon as the urine was discharged through the rectum or perineum, by recto-vesical puncture, or perineal section, not only would the cessation of the irritation due to the removal of the current of the urine from its ordinary channel suffice for the cure of the urethral disease, but it led to a speedy closure of perineal fistulæ that previously had resisted all treatment. Quite recently I have shown that precisely the same surgical principle can be applied to the treatment of numerous affections of the rectum and anus that has led to such happy results in lesions of the air-passages, the food-pipe and the urinary canal.

These various conditions illustrate the fact that the surgeon must obtain from nature the principles upon which to found his art. For the healthy play of the organism, each part must perform its work, and the products of that activity must be disposed of according to the economy of the human framework. Damage irretrievably a portion of the body

not absolutely essential to life, and the surgeon, working in the way indicated by nature, can amputate the part and effect a cure. Give nature efficient aid in that which without assistance she cannot accomplish harmlessly, and you at once unfold a fertile field for surgical labor.

We have just glanced at operations for diverting secretions: Can we ever advantageously excise organs and at a stroke abolish functions? This has been proposed by Hegar in cases of exhausting metrorrhagia, and by Battey in certain forms of amenorrhœa, dysmenorrhœa and reflex nervous disturbances dependent upon menstrual derangement and ovarian disease. In each instance, the operation proposed is essentially the same, and is the complete removal of both ovaries.

These operations have been sharply criticised, and the principles upon which they are based denounced as unsurgical. To-day I ask you to accompany me in a brief review of the conditions that can be ameliorated or cured by excision of the uterine appendages; of the objections that have been made to the operation; and of the surgical aspects of the procedure itself.

First, let me say that I approach this subject purely as a surgeon. To those who have made a special study of the diseases of women, I accord precedence in all that pertains to the pathology and therapeutics of such affections—just as in all relating to the connection between ovulation and menstruation, I yield to those who have given time and thought to the elucidation of the physiology of reproduction. I reserve to myself the right of a voice in the discussion of all that pertains to operative interference in women, or in men, inasmuch as the principles that guide surgeons are essentially the same in both; and furthermore, as the question of the acceptance or the rejection of the operations of Hegar and Battey depends wholly on the sufficiency and character of the principles upon which they are based, I shall consider it my duty to discuss at length the surgical character of these procedures.

Women, between puberty and the menopause, have been brought to me by their medical attendants with the statement

that these patients had exhausted the resources of medical art without relief, and now desired to know if surgery could serve them better. I have found that the majority of these patients could be classified in this way:

1. Women with tumors of the womb large enough to produce deformity, distress from pressure, menorrhagia, severe hæmorrhages at irregular intervals, violent bearing-down pains, or dysmenorrhœa.

2. Women exhausted to the last degree by menorrhagia not connected with uterine disease.

3. Women worn out by pain connected with menstruation—pain not infrequently associated with pelvic hæmatocele, pelvic peritonitis, or pelvic cellulitis.

4. Women suffering from menstrual hysteroneuroses with gastric, pulmonary, cerebral, intestinal or other reflex symptoms associated with and dependent upon the monthly period of pelvic congestion.

And 5. Women with congenital absence of uterus or vagina, or acquired lesions obliterating the genital tract, suffering from distressing menstrual phenomena.

Before alluding to the operative procedures that may be resorted to for the relief of such patients, let us glance at the circumstances under which they come into the hands of the surgeon. These can be briefly set forth as follows: In the first place, medical aid has previously proved unavailing—the patients are steadily growing worse; and secondly, competent authority pronounces the given condition incurable so far as medical art is concerned. It is not for the surgeon to lament the limitations of medicine—he knows but too well the shortcomings of his own art. It is not for him to strive for new remedies and criticise the physician's procedures,—his duty is simply to pass upon the surgical case presented to him, and apply the rules and precepts of surgery for the relief of suffering humanity. Divested of all irrelevant matter, the problem assumes a simple form. During the menstrual life of women the recurring pelvic congestions are found to—

1. Afford nutriment to uterine tumors;
2. Lead to exhausting hæmorrhages;

3. Cause unbearable pain ;
4. Develop distressing reflex symptoms, and
5. Produce dangerous local lesions in patients with obstruction of the genital canal.

Can the surgeon cut short these recurring pelvic congestions and thus avert the consequences? Most unquestionably he can. By excising the uterine appendages, he completely prevents, or at least so diminishes these congestions that the above pathological conditions are done away with. The principle upon which the surgeon founds his action is as sound, surgically speaking, as any that ever animates him, and like most of the precepts of surgery, is based upon a careful study of Nature. Observation teaches us that the pelvic congestions and other phenomena of menstruation are dependent upon the presence and due activity of the uterine appendages, especially the ovaries and associated parts. Remove the latter, and menstruation either ceases at once, or is greatly diminished for a time, and then disappears. In those patients who suffer pain, hæmorrhage, or reflex disturbance as a consequence of the congestion incident to menstruation, the "change of life" frequently brings relief. The same is true of patients suffering from uterine growths nourished mainly by the monthly pelvic congestions; when menstruation ceases these tumors atrophy and disappear. In women in whom these pelvic congestions nourish uterine tumors, cause agonizing pain, produce exhausting hæmorrhages, develop hysteroneuroses, or give rise to dangerous local lesions in patients with obstruction of the genital canal, the surgeon by excising the uterine appendages simply hastens the time of relief by inducing the "change of life" at an earlier period than usual.

There are circumstances connected with this operation that should render the surgeon especially careful in resorting to it.

In the first place, a woman's capacity for bearing children is destroyed by it. She may be taken from the sick bed and restored to vigorous health and blooming womanhood by this procedure, but her restoration is fettered by this severe requirement—she must sacrifice all her hopes of future ma-

ternity. To the weak and exhausted invalid, this may seem a small matter ; but to the woman with renewed health and revived hopes, it may be a serious misfortune. In view of this, great care should be taken never to perform this operation except as a last resort, and then only after a full presentation of all the facts to the patient, and if she be married, to the husband as well as the wife.

In the next place, it is to be feared that occasionally the operation is solicited by patients who seek to avoid the responsibilities of maternity rather than to be relieved of grave pathological conditions. So long as the impression prevailed that the removal of the ovaries not only checked the menstrual flow, but exercised some deleterious influence upon the personal appearance and feminine characteristics of the patient, there was little danger of this happening. Now that it is definitely settled that the ovaries can be removed without the slightest impairment of feeling or feature, or the least diminution of physical or moral power other than the suppression of the monthly flow and the loss of the child-bearing function, it is no unlikely contingency. Nevertheless, it is one that can be readily discovered and defeated by a little care on the part of the surgeon.

It is not for those unfortunate sufferers whose life is made a burden by tumors of the womb, those women who have been reduced to death's door by uterine hæmorrhage or exhausted to the last degree by pain, for those far more pitiable creatures who have faded in mind and wasted in body as a consequence of mental or nervous disturbances excited by menstrual irregularities, or for those doubly unfortunate beings malformed congenitally or as the consequence of disease in whom the monthly flow, having no natural outlet, must develop local lesions, that excision of the uterine appendages should be reserved. To such this operation is an unmixed blessing.

In deciding certain cases, attention must be given to the patient's social condition and the demands others may have upon her. The unmarried woman dependent upon her own exertions for a livelihood, and the young wife whose husband can command every comfort in life for her, are very

differently situated. The widow with children to provide for, and no means save her own earnings, is on a very different footing from the newly married woman, although both may suffer in exactly the same manner. In a word, each case must be decided upon its own merits, for no general rule can be formulated that will apply to all.

The ovaries can be excised through vaginal or abdominal incisions. The experience of the writer has been wholly with the latter. The operation is by no means simple, and has difficulties peculiar to it. Thus, the abdominal walls are tense and the danger of wounding an intestine is great. In ovariectomy, the walls are lax and the intestines removed from the region through which the incision is made. In this operation, not only are the walls rigid, but the intestines press forward in such manner that the surgeon must exercise special caution or his knife will wound them.

The abdominal cavity being freely opened and the intestines drawn aside with extractors, the writer deems it best to grasp the right ovary and elevate it so that the ovary and Fallopian tube can be seized between the serrated edges of two steel bars arranged for the purpose. These bars are convex, close accurately, and when together hold firmly whatever they grasp. The ovary and Fallopian tube can be kept in position until a firm silk suture, armed with a needle at each end, is passed with a saddler stitch through the compressed parts above the surface of the bars. This suture cuts off the parts above the bars from the general circulation—a pair of curved scissors is used to sever the ovary and tube. This done, a fine needle armed with delicate silk brings the edges of the peritoneum into close contact. The same procedure is repeated on the left side, and the excision of the uterine appendages is accomplished. The abdominal wound is closed, and the subsequent management of the patient is based on the ordinary principles of surgery. The details of the operation must be adapted to the requirements of the individual case; and as the patients demanding the relief this measure affords are in widely unlike pathological states, the surgeon must rely upon the general precepts of his art, rather than depend upon routine and precedent for his guidance.

Removal of the Fallopian tubes, as well as the ovaries, is a step that experience has shown to be necessary in order that the operation may yield the patient its full benefit. Mr. Spencer Wells is disposed to ascribe the greater efficiency of excision of the uterine appendages, contrasted with simple removal of the ovaries, not so much to the greater amount of tissue taken out in the former procedure, as to the diminished supply of blood due to deligation of important blood-vessels. Whether this explanation be true or false, is of little consequence contrasted with the fact that the excision of the uterine appendages, advocated by Lawson Tait, is more certain to relieve first, and ultimately cure, those lesions for which it is employed, than the method taught by Battey—the removal simply of the ovaries.

304 *Prospect street.*

ART. II.—**The Venomous Snakes of the United States and the Treatment of their Bites.** By M. G. ELLZEY, M. D., Washington, D. C.

Concerning the venomous snakes of the United States, and the proper treatment of their bites, very erroneous notions prevail, even among surgeons and physicians of reputation and skill. There is often much needless alarm created by the bites of these animals, many persons possessing the idea that they are about certain to die, if bitten by a copperhead or rattlesnake, and being in mortal terror of those kinds which are as harmless as fishing-worms. I have concluded, therefore, that an article on this subject in this journal may serve to remove erroneous impressions and possibly in some cases to prevent useless alarm and foolish treatment.

There are in this country three genera, and only three, of poisonous snakes, viz: the rattlesnakes, the moccasins, and the vipers. The two genera, rattlesnakes and moccasins, are included by naturalists in one family, viz., the crotalidæ. Crotalid snakes have no solid teeth in the upper jaw, but are provided with an erectile grooved poison fang on each side, and are further characterized by a deep pit in the face between the eye and the nostril, and in all but two species

the tail has at the end a rattle. The species without a rattle are the copperhead and the venomous water moccasin of the Southern States. The viperine or elapaid snakes are poorly represented on this continent, *elaps fulvius* being the only one worth noticing, though in India and Africa many of the most deadly sorts are of this family. *Elaps fulvius*, the harlequin or bead snake, is hardly capable of biting under any ordinary circumstances, and probably its bite is not in the least degree dangerous.

Of the true rattlesnakes there are nearly fifty species, all prominently and distinctly marked by the possession of the rattle. It is commonly believed that among these rattlesnakes are found the most deadly species of our continent, nevertheless I think not. I believe the most deadly of American snakes to be the venomous water moccasin, commonly called at the South the cotton-mouth; technically designated *ancistrodon piscivorus*.

The copperhead, on the contrary, is unquestionably far less venomous than it has the credit of being. It is in fact very doubtful whether the bite of the copperhead is at all dangerous to the life of a healthy adult, and this accounts for the supposed success of so many absurd and useless remedies. Anything like a technical description of the many species of true rattlers would be far beyond the proposed limits of this paper. They are all, as I have said, sufficiently characterized by their rattle, and are for the most part non combative and little disposed to attack or bite unless directly challenged. They are sluggish and inactive in their movements, and are the easiest of all reptiles to disable and kill, a slight tap with a mere switch seeming to paralyze them temporarily; a few small shot about the head and neck makes a finish of the largest specimen.

The bite of any rattlesnake is a serious matter, and perhaps without effectual and prompt treatment fifteen per cent. of the cases would prove mortal to adult man; nevertheless nine out of ten of these otherwise mortal cases can be, and should be, saved by prompt and skilfull treatment. Although it is not worth while for a person bitten by the most deadly of our snakes to fall down incontinently and give up the

ghost, yet undoubtedly the bite of the cotton-mouth or venomous water moccasin of the South subjects life to a frightful hazard, seeing that frequently the bite has proven fatal within half an hour.

I have made no mention of a so-called high-land or dry-land moccasin, distinct from the copper-head, such as is described by naturalists under the technical designation *ancistrodon atrofuscus*, because in my opinion no such snake has any other than an imaginary existence; and instead of blindly copying Dr. Troost's description, naturalists of the day ought to produce the species, or eliminate this mythical moccasin from their catalogues. I am further of the opinion that the venomous water moccasin (*ancistrodon piscivorus*), is merely a variety of the copper-head (*ancistrodon contortrix*), because both of these snakes are semi-aquatic in their habits. There is scarcely a constant diagnostic difference between the two sorts; nor is the *a. piscivorus* a true water snake, whereas the semi-aquatic habits of *a. contortrix* have not been sufficiently appreciated by naturalists. I account for the more deadly venom of *piscivorus* by their Southern habitat and by their more exclusively fish diet. The harlequin or bead snake, as I have said, must have exceptional opportunities before he can bite anybody, on account of the fixed character of his fangs, and the extreme smallness of his mouth and head:

- I did not see the gentleman bitten by the one at the National Museum in Washington, but I was at the meeting of the Biological Society when the case was first described, and I failed to discover from the statement of symptoms or the duration of the case anything apparently more serious than ordinarily follows the sting of a wasp. If myself bitten by a harlequin I should not trouble myself further than to suck the bite a little and apply some hartshorn to the wound. Certainly I should not proceed to get drunk and then complain that the bite of the harlequin gives one the headache, and causes vertigo and dimness of vision, followed by nausea and vomiting. It is not commonly necessary to add the harlequin to the whisky in order to produce those symptoms.

North of $36^{\circ} 30'$ and east of the Mississippi we are called upon to deal with two sorts of venomous snakes, viz.: The rattlesnake and the copperhead. No other snake within those limits is capable of mischief. How then shall we treat the bite of a rattlesnake, or copperhead. Let us remember that the venoms of snakes and rabid animals, and all similar animal poisons, have very complex molecules, and are easily broken up into less complex innocuous substances by a great variety of chemical agents of diverse and even opposite nature, as for example acids and alkalis. The great difficulty consists, not in selecting the antidote, but in getting it into contact with the virus. The hypodermic syringe, made in strict imitation of the serpent's poison fang and gland, affords the best means of combatting the venom introduced by the bite of the snake. If the needle of the syringe be introduced into the wound made by each fang, and a syringe-ful, or even two or three syringe-fuls of dilute aqua ammonia, or of solution of bi-carbonate of soda, be injected within a few moments after the reception of the bite, the venom will be very effectually neutralized; and if now a cupping glass be exhausted over the bite a good portion of the venom may be drawn out along with the antidote. Furthermore, in combatting the collapse of a later period, the syringe is still the great resource; it is better to send a dozen syringe-fuls of brandy, ether, ammonia into the cellular tissue than to suffer the patient to perish with a stomach distended with a horrible mixture of acid, bile, mucous, and some quarts of unabsorbed alcohol. Nevertheless, after the syringe and the cupping glass, and if possible with the prior emptying of the stomach, give every five, ten, fifteen minutes, or less frequently, a tablespoonful of brandy or whiskey with three times as much water, and twenty or thirty drops of dilute aqua ammonia.

After the cupping apply immediately a large hot poultice over the bite, which renew from time to time. As soon as symptoms of dangerous collapse have passed by lengthen the intervals between the doses of spirits and water and withdraw the ammonia. It is best to wash out the lower bowels with enema of soap and warm water, and to empty the blad-

der, by catheter, if necessary. After which an enema of diffusible stimuli may, if the case is urgent, be thrown into the bowels. The bite of the venomous water moccasin or cotton-mouth may be effectually treated the same way exactly. Unhappily this terrible reptile frequently destroys life before any effective aid can be administered.

The following case, which I give from memory, was detailed to me by my friend Dr. R. H. Edwards, of Leesburg, Virginia, then a resident of Selma, Alabama. Dr. E. and a couple of friends went to the river to go in swimming, and while undressing, a cotton-mouth snake swam near the bank, which one of the gentlemen shot with a shot-gun they had with them. The snake was struck near the middle and its body severed by the charge—both portions quickly sinking and disappearing. In a few minutes one of the gentlemen plunged into the river and let himself down to try the depth. He came up immediately with urgent outcry for assistance, when the fangs of the snake were found so strongly sunk into the ankles between the maleolus and tendo achillis, that the anterior portion of the mutilated beast adhered to his heel, and had to be pulled away. Within half an hour the unfortunate gentleman died, in horrible agony, before assistance of any avail could be procured. This case makes a frightful exhibit of the deadly nature of this snake and exposes at the same time the popular fallacy that a snake cannot bite under water.

During my residence at the South I failed to meet with a case of the bite of this snake, but I am reliably informed of at least three other cases with a fatal result inside of half an hour. I am therefore of the opinion that the poisonous water moccasin is the most deadly of our snakes. On the other hand I have repeatedly treated the bite of copperheads, and have met with a great many bitten persons who have been treated by other physicians, and by quacks and grannies, by all sorts of methods, and I have never either seen or heard of a fatal case. I have also seen dogs bitten by these snakes, scores of times, and never knew one to die. I owned, myself, a pointer bitch which was bitten by them probably more than twenty times, certainly more than a

dozen times in one season, and I think therefore that the circumstances must be unusual under which the bite of the copperhead would be dangerous to adult man. Yet the case is always so serious, and the symptoms generally so urgent, that it is easy to believe a fatal result *might* occur.

I have no hesitation in stating the facts as I know them, to a patient who has received the bite of a copperhead, and assuring him that there is scarcely a remote danger to his life, but that painful results and serious sickness are almost inevitable. Fright is undoubtedly a potent and energetic depressant, and if a patient in dangerous collapse be badly frightened he will probably die.

To remove alarm is one of the most important functions of physician, friends, and nurses under such circumstances. To remove after effects, iron, quinine, strychnine, brandy, with nourishing diet, pure air and free exercise are to be relied upon. Potassium iodide, and remedies of that class, vaguely supposed to remove something from the blood, do harm and not good. The blood needs something useful in the way of tissue building material and force furnishing material put into it, rather than to have any something driven out of it. Quinine and iron and cod-liver oil are more to the purpose, I venture to think, than iodides, chlorides and alkalis. Fresh air, and sunlight and exercise by day, followed by that which they bring in their train—sweet restful physiological sleep by night—these are factors immensely potent for good when the foci and centres of physiological force have been rudely shaken.

ART. III.—**Concerning the Communicability of Phthisis.** By W. THORNTON PARKER, M. D., Acting Assistant Surgeon U. S. A., Fort Union, New Mexico.

The great interest at present manifested by the profession on the subject of the communicability of phthisis is my apology for offering the following cases. A prompt recognition by the medical adviser of incipient phthisis is of the utmost importance for the future welfare of the patient, and a speedy *change* of residence cannot be too forcibly urged.

It is not sufficient excuse for the invalid remaining at home, that his opportunities for *comfort* will be greater *there*.

I hold that *under certain circumstances* phthisis is communicable, *i. e.*, where the patient spends a large portion of the day and night in constant contact with his attendants, or where the constitution of the attendant is delicate or has become weakened by long and arduous nursing, and where the sleeping hours are spent in the same room with one suffering from phthisis. Those most exposed and liable to injury, if not actually acquiring the disease, are, first, the wife, and secondly, the children. I believe, however, that physicians and clergymen, under certain conditions of impaired health, or of bodily fatigue, are susceptible.

CASE 1.—A physician suffering from phthisis—probably acquired—had overworked in a large practice, and been exposed to severe weather and night-work when utterly unprepared, physically, for such exposure. He slept in the same room and bed with his wife, and she probably acquired the disease from him, although a sister died of phthisis. The wife was much reduced by over-work, nursing and constant attendance upon her husband, but kept up very well until his death, which seemed to utterly dishearten her. She died three years after her husband of phthisis.

CASE 2.—A clergyman very much over-worked in a large parish, and suffering from nervous prostration, spent a great portion of his time ministering to the wants of the sick and dying, especially amongst chronic cases of phthisis, often visiting them in their homes, and reading and praying with them in close over-heated rooms. Needing a change, he undertook a journey from New York city to his home in Kentucky in mid-winter, and was compelled to leave a hot sleeping-car at night and step out into a snow storm, a severe illness being the result. This case, after everything apparently had been done, was abandoned as hopeless, but is now doing remarkably well and promises to continue so.

CASE 3.—Wife of the above-mentioned clergyman, and had formerly enjoyed excellent health. She nursed her husband for two years with unwavering fidelity and with exceptional intelligence, and was in constant attendance day and night. At the request of a friend she spent some hours looking over a house which had been empty for some time, thereby contracting a severe cold, resulting in pleuro-pneumonia. In June, 1881, her case was considered a severe

form of phthisis, and pronounced by her medical attendant to be hopeless, various methods of treatment having been resorted to without success. This case, however, which was considered to be incurable, is, at the date of the present writing, apparently gaining rapidly.

Both of these cases began to improve after being placed under the Salisbury plan of treatment.*

Concerning the causes of phthisis, I beg leave to quote from the admirable writings of *Green*:

“General feebleness and want of vigor lead to loss of muscular strength and weakness of the heart, and thus tend to prevent the full expansion of the chest, to cause a stooping posture of the body and to impair the force of the circulation—all conditions favoring blood stagnation in the highest portion of the lungs; further, the toneless condition of the blood-vessels, and the poverty of the blood with which the constitutional feebleness is so often associated furnish the conditions which are the most favorable to transudation. Lastly, in connection with this part of our subject, I must ask you to bear in mind that one important factor in the pathology of phthisis is the state of the general health, quite apart from any inherited constitutional feebleness, and there can be no doubt that an impaired state of health very greatly favors the development of the disease. This fact gives additional support to the view we have been taking, inasmuch as any acquired weakness must necessarily play the same rôle in the causation of apical stagnation and exudation, as the inherited feebleness to which we have alluded. It is when the two are associated, as they so frequently are, that we have the conditions most favorable to the development of the disease.”

Whatever the communicability *possible* in phthisis, we can, by attention to the general health, and by changing the residence of incipient cases and improving the habits of our patients, do very much at present to lessen the terrors of this great plague. Undoubtedly we are but beginning to treat this disease, and before long we shall be able to offer still greater hope than at present. The world is rich in restora-

*Vide *Philadelphia Medical Times*, February 9, 1884.

tive climates, and regions yet beyond the reach of travellers will offer a secure resting place for these invalids when our accessible health resorts have been ruined by increase of population and other evils resulting from over-crowding.

Original Translations.

From the French and German. By WM. C. DABNEY, M. D., Charlottesville, Va.

Hysterectomy in the Treatment of Cancer of the Uterus.—This subject, which has been attracting a good deal of attention recently, was quite fully discussed at the meeting of the Société de Chirurgie on June 4th last.

The discussion was introduced by the report of a very remarkable case occurring in the practice of M. Jules Boeckel, of Strasbourg. The patient in this case was a woman, 40 years old, suffering from cancer of the neck of the uterus, which had first been observed three months before. The tumor was large and the neck very hard; the uterus was mobile and the cul-de-sac appeared to be free from disease. The general condition of the patient was very good. Hysterectomy was performed by the vaginal method. The first step of the operation consisted in drawing the uterus down till the neck projected more than a centimetre out of the vulva; an incision was then made in the posterior cul-de-sac which opened the peritoneal cavity; then the anterior surface of the uterus was separated by dissection from the base of the bladder; finally the two broad ligaments were ligated and the uterus removed. Finding, however, that there was an enlarged gland in one of the ligaments, he cut it out, causing thereby a profuse hæmorrhage, which could only be arrested by pressure with small forceps, which had to be retained some hours in place. The immediate results of the operation were very favorable; the patient had some trouble from nausea and vomiting, but cicatrization went on regularly. The intestines showed no disposition to protrude through as stitches were taken, nor were any drains employed—M. Boeckel contenting himself with plugging the vagina with “iodoform gauze.”

On the third day it was found that the urine was being discharged through the vagina, and an examination made some weeks afterwards showed that there was a fistula in one of the ureters. To relieve this, M. Boeckel removed the kid-

ney on the corresponding side—an operation from which the patient made a good recovery, and was well in a month. Two months afterwards the patient returned to the hospital, and the cancer was found to have returned in the pelvic ganglia, and the patient died soon afterwards.

M. Boeckel stated that one patient out of every three on whom hysterectomy was performed died, and came to the conclusion that the operation was only justifiable for cancer under very exceptional circumstances.

M. Verneuil said that in spite of the success obtained by M. Boeckel in this case, the operation was a bad one and the results obtained from it were in no way superior to those furnished by simple dressings and palliative operations. He thought it quite sure that M. Boeckel's patient would have lived longer and had more comfort if she had never been operated on.

M. Tevrier mentioned a case of uterine cancer in which hysterectomy appeared to be indicated. The tumor was limited and the uterus mobile. He did not perform hysterectomy, however, on account of the difficulties and dangers attending the operation—the ligation *en masse* of the broad ligaments, for instance, is extremely difficult and sometimes impossible. He therefore simply removed the neck, an operation which was much simpler, and the apparent cure had now lasted two months.

M. Polaillon said that a patient with cancer of the *neck* of the uterus lived two years and a half on an average, and one with cancer of the *body* lived three years. Hysterotomy, when it did not cause the death of the patient immediately, confined her to her bed for some time, and thus promoted the growth of the cancerous disease. Up to the present time all the cases treated by hysterectomy had speedily relapsed, and he thought the operation should only be practised in very exceptional cases. Simple modes of treatment, such as cauterizations and different injections prolonged life considerably, and were in themselves devoid of danger. The advocates of hysterectomy advised that the operation be done very early, but it was unnecessary them—a partial removal of the organ sufficing. He had himself removed the neck of the uterus for cancer in a woman seventy-two years old more than a year ago, and the patient up to this time had no return of the disease.

M. Lucas-Championniere had not performed hysterectomy for cancer himself, but he had assisted Billroth in such an operation, and had been struck with the facility with which

the operation was done. He did not think a positive opinion could yet be formed as to the propriety of the operation. Some cases had been reported where two years had passed without relapse, though of course it was possible that there had been a mistake in diagnosis, unless a microscopic examination was made. Partial operations, such as removal of the neck, he thought were of "mediocre" value only.

M. Tevrier said that while he had seen good results from removal of the neck only, yet the same rule was applicable here as elsewhere, namely, that an abundance of tissue should be removed.

M. Trelat had obtained no good results from partial operations, though he had tried all kinds. Simple dressings had given him as good results as any of the operative procedures proper. With respect to hysterectomy, he thought it should not be absolutely condemned, because the prognosis, without a thorough operation, was certainly most hopeless; but the operation should be done in the very commencement of the disease to give any hope of success. Unfortunately, patients very seldom present themselves for treatment in this stage of the disease, and ordinarily the only thing for the surgeon to do is to use suitable dressings for the ulcerated surfaces.

M. Bouilly called attention to the fact that it is sometimes impossible to draw the uterus down sufficiently low to operate. In one case he had been deterred by this difficulty when everything else seemed to indicate hysterectomy.

M. Boeckel said that he had seen such cases, and it was necessary then to give up the operation.—*Le Practicien*, June 23d, 1884.

The Hypogastric Operation for Stone in the Bladder, Compared with Lithotomy.—M. Tuffier, an interne of M. Guyon, has recently published a paper (*Annales des Maladies Genito-Urinaires*, May, 1884), on the hypogastric operation for stone in the bladder, in which he draws a comparison between the results furnished by this operation and those furnished by rapid lithotritry in prolonged sitting. He states that the mortality of the latter is nine times less than that of the hypogastric section. The latter, too, necessitates a much more prolonged and painful after-treatment, and he concludes that rapid lithotritry in prolonged sittings is far superior to all other operations for stone in the bladder, and that cutting operations, of which he thinks the hypogastric the best, should only be practised in those very exceptional cases in which litholapaxy is inadmissible, either from the size of the calculus or its extreme hardness. He calls attention also to

the advantage to be derived in diagnosis from ballottement through the rectum when the bladder is distended with water.

On Papoyotin.—Prof. Finkler (Report to the Third Congress for Internal Medicine in Berlin, *Deutsche Med. Zeitung*, 1884, No. 34), calls attention in the first place to the very different results obtained by different observers from the use of papoyotin. The cause is to be found, he thinks, in the difference in quality of the samples of the drug exposed for sale.

He thinks it definitely settled that it is a ferment which has the property of digesting albumen under certain conditions of temperature and chemical reaction. He thinks it probable that the value of the drug is sometimes destroyed by its mode of preparation.

The sample used by Prof. Finkler himself was obtained directly from South America, and had been prepared there by a German chemist. It dissolved a thousand times its weight of fibrin in a short time. This digestion took place in acid, alkaline or neutral fluids, or when dissolved in water simply; indeed, the latter solution, namely, in simple water, seemed to be the most suitable; and this property of acting under circumstances so various as to chemical reaction, renders papoyotin especially serviceable for use in enemata, since the reaction of the intestinal secretion will not interfere in any way with the usefulness of the drug. The solvent action of papoyotin on croupous or diphtheritic membranes takes place sometimes in a few hours and sometimes after a day or two; the membranes come off in shreds or can be wiped off with a brush, and there is no bleeding or other injury caused thereby. After the solution of the membrane there is a marked reduction in the temperature of the patient, so that the coming exacerbation frequently fails to appear if the membranes be removed in the afternoon.

Supposing the question as to the efficacy of papoyotin as a ferment and solvent of fibrin to be definitely settled, it remains to be seen whether it can be used for artificial digestion, peptonising milk, etc.

Prof. Rossbach says that any one who denies the power of papoyotin to dissolve false membranes in croup, must either have failed to carry out the treatment properly or have experimented with a worthless specimen of the drug.

Its use in the larynx is perfectly safe if it be properly applied to the surfaces covered with false membrane. The effect is not instantaneous, and hence when suffocation is

threatening it cannot be expected to furnish relief, and tracheotomy may have to be resorted to.

Paraldehyde as a Hypnotic.—(*Central-blatt für Klinische Medizin*, 1874, No. 18). This paper, by Dr. El. Kurz, is based on the study of twenty-four cases in which paraldehyde was employed to produce sleep. In some of these cases repeated doses were given, and the drug had been continued for a considerable time. He reaches the following conclusions:

Paraldehyde produces sleep more nearly like natural slumber than any other agent which has yet been employed. Nor is it followed by any unpleasant after consequences, as most other agents of this class are, such as morphia and chloral.

A further advantage in this agent is that patients do not acquire a tolerance to it so as to need larger and larger doses to produce sleep, as is the case with chloral and morphia; and there are no difficulties in the way of stopping the use of the drug when it can be dispensed with. Whether very prolonged use will be followed by evil results cannot yet be determined.

The cases in which paraldehyde gives the best results are those in which the sleeplessness is not due to pain, cough, or difficulty of breathing. It is useful in the same class of cases that chloral hydrate is. In irritative conditions, in sleeplessness from psychical causes, and in consequence of pathological changes in the nervous system, it finds its chief value.

The ordinary dose was three grammes, sometimes four, and it was generally given in watery solution.

Analyses, Selections, etc.

Treatment of Cholera Infantum—In the course of an article on this disease, in the *Therapeutic Gazette*, May 1884, Dr. Alban S. Payne, of Atlanta, Ga., says: I regard the cholera infantum of our climate simply a reflex action usually associated with irritation of the spinal cord and base of the brain, but, clothed in the habiliments of cholera infantum or of cholera morbus, a modified form of Asiatic cholera. I have seen as pure cases of Asiatic cholera in the mountainous regions of Virginia as I ever did at Quarantine off New York city. Why should not the painful process of dentition be as likely to cause irritation of the spinal cord and base of the brain, and its meningeal coverings, as to do so upon the distant

mucous follicles of the intestines? As the tooth exerts some pressure upon the peripheral branches of the great sympathetic nerve, I should think more reasonable that it did so. Again, with this view of the question, you can more readily account for the blood-shot eyes, so often seen in severe cases of cholera infantum; more easily also explain the perverted action of remedial agents. I have seen cases where sulphate of morphine appeared to purge, and camphor and opium in free doses scarcely controlled the bowels. Also, the wonderful toleration of calomel in this weakened state of the bowels is only reconcilable with the theory of brain irritation. Alcohol, the great pacificator of irritation of the brain, here acts as a charm. Then the pulse is peculiarly rapid, but thready, as if it had been a corded pulse that had by excessive reflex action been reduced to a smaller cord—a thread. I will not discuss this interesting subject any further at this time, but will proceed to give the treatment that I have found in long years of practice to give the best results.

To meet the first indications in the early stages of the disease I have found the simple, good, old-fashioned iced ‘mint julep’ the most efficient remedy; and alcoholic liquors, regulated to please the taste and inclinations of the patient, should be continued through all the stages of this disease, assisted by mustard plasters to the nape of the neck, to the epigastrium, and to the ankles or wrists. In severe and extreme cases I use the red pepper hot-bath. Place 10 or 12 pods of red pepper in 30 gallons of boiling water, let stand until it cools down to 110° to 120° Fahrenheit; then souse the little patient into the bath, allowing him to remain from 3 to 5 minutes, then carefully rubbing him dry, apply a flannel roller over his stomach and bowels. Rub his neck from the base of the cerebellum along the spine down to the spinous process of the first dorsal vertebra with croton oil. If the specific eruption is not produced by two or three rubbings do not hesitate to apply a fly blister. The biliary secretion in these cases being always deficient, and since no reliance can ever be placed in permanent recovery of the patient until the specific biliary discharges (chopped spinach discharges) show themselves, either use small, oft-repeated doses of calomel, prepared chalk and a minute quantity of ipecac with powdered ginger, or, what I have found very serviceable, hydragryrum cum cretâ, combined with anodynes. Some cases are much benefited by the administration of the bromides of potash, calcium and ammonium. I ignore the regular astringents entirely. To meet the second and third indications,

I give the mono-bromide of camphor, every two to four hours, and press this remedy until it produces sleep and the bowels are quieted. I have found this remedy not only useful in cholera infantum, but prefer it to any of the preparations of opium for young children. I generally mix six grains of mono-bromide of camphor with 120 grains of sugar of milk, and give from one to four grains every four hours to a child twelve months old, with a liberal dose of quinine at sundown and early in the morning, the dose according to age. Absolute cleanliness to be required as a *sine qua non*.

If the air is impure where the child is sick it should by all means be removed to a pure, salubrious atmosphere, being careful, however, in carrying it from a warmer to a colder climate. In the commencement of the disease, when apparently a common diarrhœa is the only trouble, I cannot too highly recommend the chlor-anodyne, as prepared by Parke, Davis & Co., of Detroit, Michigan. For the diet I know of nothing better than Mellin's Food for Infants and Invalids.

Objections to the use of Corrosive Sublimate Dressings.—The following is taken from the *St. Louis Courier of Medicine*, April, 1884: Corrosive sublimate at the present time is being used as a cheap and convenient substitute for the antiseptics hitherto adopted. In the great Dublin Lying-in Hospital a solution of 8 grs. to the pint of water is used in place of the carbolic acid; on the Continent gauze treated with the mercurial is extensively used as a surgical dressing.

A priori one would be led to suspect the free use of this energetic drug, and an article in the *Berlin. Klin. Woch.* (No. 2, 1884), by Dr. Reichel, of Breslau, justifies this apprehension. Dr. Reichel describes a case of general erythema caused by sublimate dressing. A man had been operated upon for relief of genu valgum; the leg from foot to pubes was enveloped in the sublimate gauze and a splint applied. On the fifth day complaint was made of burning and itching in the limb, which sensations gradually increased in intensity, compelling the removal of the bandages on the ninth day. On the day previous the burning was felt on both breast and abdomen; also there was noticed a punctiform rash over the same region. The leg was found to be covered with an intense papulo-vesicular eczema; the integument was now œematous. A general erythema was now developed; the whole body, except face and neck, was thickly covered with small, red spots, especially so on the breast, abdomen, scrotum inside of right thigh, and back of elbows. The general

health of the patient was good; there was no salivation; the temperature, however, was elevated. Salicylic dressing was substituted, and on the same day the temperature fell to normal. On the next day the rash on the front of the body was paler in color and the leg more comfortable. Four days after the removal of the sublimate bandage the whole erythema disappeared.

The case evidently was one of *eczema mercuriale*, such as often appears on the site of mercurial inunction. This general development is rare; it was the only case observed in the Breslau Clinic when the mercurial gauze had been in use nine months. Dr. R. had, however, observed that this dressing occasioned a more frequent and more intense local *eczema* than the carbolic acid; also in such cases the healing of wounds was markedly delayed, a serous discharge being set up.

Atropine in Whooping Cough.—In the *Cincinnati Lancet and Clinic*, May 10, 1884, Dr. Frank Warner, Columbus, O., has the following valuable article on this subject: There are few diseases that have had so many remedies assigned to them as whooping cough. During every epidemic of the disorder one or more remedies are vaunted as “specific,” which live and flourish for a time, but are soon consigned, with the other remedies which have preceded them, to a hopeless oblivion. By a careful analysis of the various reports of cases, we find that those remedies which flourish the longest, and retain the greatest number of advocates, are the medicines termed the “neurotics.” And, really, this is what we might expect, if we only stop to consider that the disease in question is essentially a “neurosis;” yet this is about all we can say of its etiology. We know very little of the manner in which it originates, or how it is propagated; and we are still more ignorant of the causes of its erratic career.

Excluding scarlatina, it is one of the most uncertain diseases in its career of all the infectious maladies. Commencing mildly, it may terminate fatally; or, beginning severely, it may soon merge into a benign type of the disease; and sometimes, when to all appearances it has quite ended its career, it suddenly reappears after an interval of several weeks. It is usually ushered in by a severe catarrh, yet the characteristic “whoop” is often the first thing to attract attention. Taking into consideration the various anomalies of the disorder, it is not strange that so many remedies have gained popularity in the treatment of this disease, and many of them, too, gaining the title of “specifics.” But no re-

medy can really be called a specific unless it possess properties which will act certainly and definitely in each case, and so that we can foretell the result in a given instance.

It would be claiming too much for atropia to say that it is a "specific" in whooping cough, for it is not; yet it probably advances as nearly to it as any remedy that has ever been used for the disease. Trousseau inaugurated the treatment of whooping cough by this remedy, not using, however, the alkaloid, but belladonna in the form of extract or simply the powdered drug. But atropia is much preferable, for it is of definite strength, tasteless, and the dose can be more easily regulated because of its unvarying strength. One of the best ways of administering the remedy to children is in 1-200 gr. doses, three or four times a day. To test the question of its usefulness, one should note the number of paroxysms in the twenty-four hours, as suggested by Trousseau, or perhaps what is better, include in your observation only the paroxysms occurring during the waking hours, as one is apt to miss counting one or more of the nervous manifestations occurring during the night. In many cases, after a few days, we find a steady diminution in the number of paroxysms, also a diminution in their duration, as well as an alteration in the character of the "whoop." But if the atropia be now withheld, they again recur with their former frequency and character.

Three or four days have generally elapsed before any diminution can be noticed either in the character or number of "whoops," and all cases will not respond with equal facility; indeed, I may say that many will not respond at all to its influence. But still a fair proportion of the cases do better under the use of atropia than by any other mode of treatment. A prominent writer, speaking of this subject, declares whooping cough to be essentially a neurosis, and that "if we are to judge by the sensations described to us by those who are old enough to analyse their feelings, it is the laryngeal branches of the pneumogastric nerve that are primarily affected. The frequency, however, of the paroxysm is no index to its severity, and conversely; nevertheless, the frequency and intensity of the phenomena exhibited may be and often are, coincident. Is there any explanation to be offered of this? I think so. No one who has much to do with the ailments of childhood fails to observe what very different effects are produced by apparently the same irritation. In some there are excited convulsive movements, fever, restlessness, etc.; whilst in another perhaps of the same family, there is scarcely any systemic disturbance produced. This

probably due to inherent susceptibility of some children to sympathetic action and reflex phenomena; and as nervous exaltation, or nerve tension, is far higher in children than in adults, we see, as a rule, greater severity and consequent prostration in some children than in others."

Shroeder von der Kolk thinks the medulla oblongata is the principal center whence the more general reflex movements derive their origin, it having a special capacity for exciting them. Under certain conditions this capacity may become greatly excited. We can easily understand how the peculiar irritation which probably exists at the terminal filaments of the larynx and trachea sets up these reflex phenomena so characteristic of the disease, as these take their origin from the medulla oblongata.

There is no medicine which has so calmative an effect upon the pneumogastric nerve and the medulla oblongata as atropia. It diminishes both irritability and sensibility. It is highly probable that atropine exerts its beneficial influence in whooping cough by diminishing the capacity of the terminal filaments of the laryngeal nerve to receive impressions, and also by decreasing the capacity of the medulla oblongata to excite reflex action.

Agaricin in the Night Sweats of Phthisis.—We take the following from the *Weekly Medical Review*, April 5, 1884: Of late agaricin, the active principle of the agaricus albus, a fungus found on the European and Canadian larch, has been advocated as an efficient agent in the trouble some night sweats of phthisis. Seifert has reported twelve cases of phthysical patients and one of excessive perspiration from a paralysis treated satisfactorily with this remedy. The observations have been continued by Professor Riegel, and reported by his assistant, Dr. Proebsting (*Centralblatt f. Klin. Med.*, No. 6, 1884).

The agaricin has been used by this observer since November, 1882, and the formula employed has been the one recommended by Dr. Young in the *Glasg. Med. Jour.* in March, 1884: R. Agaricin, 0.5; pulv. doveri, 7.5; rad. alth. and mucilage aa, 4.0. Make 100 pills. The results of the observations arising from the exhibition of several hundred doses is, that in the majority of phthysical patients the night sweats cease or are greatly diminished after the exhibition of the first dose, and that two pills, in those cases where one (0.005 agaricin) only diminished the perspiration, had the full effect. One patient, however, with very profuse phthysical night sweats was not much influenced by 0.01 of agaricin

and three others were not influenced at all by still larger doses. In two of the three mentioned 0.001 of atropine was also without effect.

Their experience showed them that the action of the drug was manifest very quickly after its administration. For example, to one patient who was found in a state of excessive perspiration two of the above pills were given and in a half hour after the sweating had ceased. To another who was suffering from endocarditis with large drops of perspiration on the chest two pills were given and in a brief time after the skin was dry. In other patients, especially those suffering from phthisical night sweats, the full action of the agaricin was not exhibited for several hours. After having taken a pill for a few nights in succession the perspiration would cease for several nights. In some cases after the reappearance of the sweats it was necessary to double the dose in order to obtain the effects first obtained by a single pill.

No injurious effect either on the alimentary canal or the nervous system was observed by a continuation of the remedy. In only two cases, one an alcoholic with cirrhosis of the liver, and the other consumptive, were any unfavorable sensations complained of.

In general, then, we can testify that agaricin in doses of 0.005 to 0.01 gramme, say from .09 to .16 of grain, in most cases checks profuse perspiration. That in some cases it operates very quickly while in others it requires several hours to produce its effect. That its effect is sustained for several days and that only exceptionally does it produce any unpleasant symptom.

Nitrite of Amyl for Tinnitus Aurium.—Dr. Adolph Alt read a paper on this subject before the St. Louis Medical Society, June 21st, 1884, which is published in the *Weekly Medical Review*, August 2d, 1884. He states that very few remedies are of any value in the treatment of this distressing symptom.

The description the patients give of the noise vary considerably. They compare them to the ringing of bells, the blowing of a steam whistle, the boiling of a tea kettle, the rushing of water, the singing of birds, the chirping of a cricket, the rolling of carriages, the murmur of trees, and so on. In other cases, patients state that they hear continually short connected melodies, or even noises like the cry of a child; in others, the noise is a rhythmical hammering. In a general sense, the patients are influenced in their comparison by their mode of life.

By analysing the different noises complained of, we may distinguish between noises which lie in the higher, and those which lie in the lower octaves of the musical scale. The former we may very appropriately call "ringing," while the latter may be called "roaring." The ringing is especially frequent in cases of *otitis media catarrhalis chronica*.

Whatever the noise complained of may be there is always a disease of the auditory apparatus at its base. In a small number of cases the noises are due to disturbances in the vascular system. Thus, Dr. C. H. Burnett, of Philadelphia, reported three cases in which lesions of the sympathetic nerve caused flushing of the skin surrounding a ear and tinnitus; and Dr. C. Brandeis, of New York, two cases, in one of which the tinnitus was due to dilatation of the vertebral artery, which supplies the labyrinth, in consequence of a lesion of the sympathetic nerve due to spondylitis of the cervical vertebræ. In the other case, the tinnitus accompanied and disappeared with a fibrous goitre, in which case the noise was undoubtedly due to congestion of the veins which go to the jugular vein, and among which are those of the labyrinth. Noises may further on be due to aneurism, or to a varix aneurismaticus of the carotid artery within the canalis caroticus in the petrous bone. In other cases, the noises are due to anæmia. We find tinnitus in affections of the external meatus, or of the Eustachian tube as well as in affections of the inner and middle ear. There must, therefore, be different factors at work to bring about these subjective noises.

When, for instance, the noise is due to the presence of hardened cerumen or a foreign body in the external auditory meatus, the pressure of such a foreign body upon the membrana tympani is probably directly transmitted to the fluid in the inner ear, and thus the otic nerve being pressed upon, the perception of noise is brought about. When, however, the noise is due to closure of the Eustachian tube, the exhaustion of air in the middle ear will cause this and the inner ear to be under a higher atmospheric pressure than in the normal condition, and again noises are perceived. A similar pressure is exerted by exudations into the middle ear, and by the contraction of newly formed tissue with contraction of the membrana tympani and ankylosis of the ossicles as we find it in chronic *otitis media catarrhalis*. The supposition of a tonic spasm of the stapedius muscle (Kessel) or of the tensor tympani (Woakes) causing a muscular noise, seems to be applicable to very few cases of tinnitus aurium indeed.

In a small number of cases the noises are undoubtedly due to affections of the otic nerve itself.

Tinnitus aurium, when due to an obstacle to the free passage of air in the Eustachian tube, or to the presence of a foreign body, or of hardened wax in the external auditory meatus, or to an acute catarrhal otitis media, usually disappears with the removal of its cause.

In 1876 Dr. J. Michael, of Hamburg, Germany, published a series of observations on the therapeutic value of nitrite of amyl in tinnitus aurium (Knapp's Archives, Vol. V., page 535), which it seems to me ought to have encouraged the profession to make a great many more experiments with this remedy than there seems to have been made. Michael did not claim more than that in some cases of obstinate tinnitus aurium the inhalation of nitrite of amyl had given him great satisfaction. Perhaps just this modest way in which he published his observations has been the cause that nobody seems to have repeated his experiments.

The action of nitrite of amyl is, in short, according to Binz, the relaxation of the blood vessels, diminution of the blood pressure, vertigo and unconsciousness. The inhalation causes the face to be flushed and the carotid arteries to pulsate. The toxical effects pass off after a few minutes, sometimes leaving a slight headache behind. It is best inhaled by dropping it on cotton, as it is apt to eat holes into a handkerchief.

Although, according to Binz and others the remedy is perfectly harmless, I have met with three cases, all of females, in which the first inspiration almost brought about a fainting spell, which was at least very alarming. I am now, therefore, always very cautious when using it for the first time on a patient. If it is well borne, nitrite of amyl should be inhaled until vertigo ensues; if not persisted in to this extent, the inhalation is worthless and ineffectual. As in some persons, especially females, the inhalation of nitrite of amyl seems to have an exciting effect in the sexual sphere, I prefer the presence of a third person, especially when giving it to a young girl. In most people the inhalation is followed by a desire to urinate.

With regard to tinnitus aurium, the effect of the nitrite of amyl is sometimes nil; in other cases it will increase the noise considerably, but when inhalation is discontinued, the tinnitus will be the same as before; again in other cases this exaggeration of the symptoms is followed by a considerable diminution, which is temporary or lasting; and lastly, in a

small number of cases, the inhalation will cause the noise to become less noticeable without previous exaggeration.

On the whole I find that only in such patients are we at all likely to see an effect (even if it is only a temporary one) from the inhalations whose noises are at the first trial changed in some way, if only in the key.

In order to positively arrive at a conclusion as to which cases might always be likely to derive some benefit from the inhalation of nitrite of amyl, I have used it quite extensively for seven years. I have compiled a list of one hundred cases of tinnitus aurium consequent upon chronic otitis media catarrhalis, in which I have employed this remedy. The table concerns 58 female and 42 male patients, the youngest individual being 7, the oldest 74 years of age. The results of the treatment with nitrite of amyl, aside from the treatment for the otitis media catarrhalis chronica were:

No effect at all, 35; momentary improvement, 10; temporary improvement, 25; considerable lasting improvement, 16; Apparently cured, 14.

I am well aware that in all such statistics a source of error may be that cases have gone over into some other hands, but some of the cases named as apparently cured, I had occasion to see and examine again in periods varying from six months to three years.

When trying to find characteristic symptoms, which the cases improved and cured by the inhalation might have in common, I could not find any, not even their general condition of health being alike in all cases. This is especially striking when looking at the cases apparently cured. Of those cured there were ten males and four females. The general condition of the males was good in all of these cases, while the general health of the four cured females was twice in a poor and twice in a bad condition.

Of those considerably and lastingly improved nine were males and seven females, the general health of the latter being in a good condition five times and twice in a poor one, while the general health of the males was almost uniformly good (eight times good, one time poor).

I therefore am as unable as Michael was to say in which cases a beneficial effect upon the tinnitus may *a priori* be expected from the inhalation of nitrite of amyl, nor can I explain its action. If it was not as high an authority as Binz is, who states that the inhalation of nitrite of amyl causes diminution of blood-pressure, I would be inclined to believe that it causes an increased blood-pressure, as the pulse be-

comes strong and full, even in anæmic individuals, and I would then consider its beneficial effect to be probably due to a forcible dilatation of the compressed blood-vessels, an increased nutrition of the parts affected with chronic otitis media catarrhalis. At any rate a remedy which does away with so distressing a symptom as is tinnitus aurium in 14 per cent. and improves it lastingly in 16 per cent. deserves to be kept in mind, and when once the experiments made with it will be more numerous than my own are to-day, we may perhaps be able to select the cases in which it may at once be expected to act beneficially.

Primary Syphilis of a Finger.—In the *Journal of Cutaneous and Venereal Diseases*, August, 1884, Dr. Chas. P. Russell, of Utica, N. Y., relates a case of this kind which teaches the lesson of the necessity of careful diagnosis. The case is really a remarkable one. On January 25th, Mr. D., restaurant keeper, a large, heavily built man, consulted me for a peculiar looking sore upon the right index finger just under the nail. The appearance presented was that of a very shallow ulcer seated upon an inflamed indurated base. The amount of infiltration was so great as to give a buncchy appearance about the nail and was out of all proportion to the size of the ulcer.

The patient stated, that while opening oysters he pricked his finger with a piece of shell. The surface was thoroughly treated with nitrite of silver. He presented himself again in a few days with the finger in the same condition as before, still considerable induration, and surface of sore not disposed to heal. Still regarding it as an irritated wound, the possibility of syphilitic inoculation did not suggest itself to me. A twenty grain to the ounce iodoform ointment was now applied on general principles, and under its persistent use for three weeks the surface healed, but left behind a clubby, misshapen finger end.

Our patient did not show himself again until March 22d, when he complained of a tired, languid feeling, anorexia, headache, and even fever. His tongue was heavily coated. Still unsuspecting of syphilis, and thinking he might be troubled with a torpid liver, I prescribed the usual remedies and followed them up with a tonic. He presented himself again on the 28th, saying that he felt better, but not all right yet. He, now, in a rather unconcerned manner, directed my attention to an eruption upon the arms and neck.

This consisted of numerous prominent dull-red papules,

varying in size. The largest ones were found upon the neck, and a few here and there were inclined to scale. A more thorough examination disclosed the fact that the eruption was a generalized one. The outbreak was entirely of the papular form. There were no other lesions. Inquiry now elicited the fact that his throat had been sore for about three weeks. (It could not have troubled him much, as he had not spoken of it before.) The cervical and epitrochlear glands were slightly enlarged. The diagnosis of syphilis was now made, and the nature of the disease was explained to the patient. He admitted that about two weeks before he first presented himself, he had been fooling with a loose woman and had placed his finger in her vagina.

The finger undoubtedly became inoculated at the time, and the strangely obstinate sore was, in the light of what followed, plainly a true hard chancre, with more than the ordinary induration. Now, to take a retrospective glance, we have a sore which heals in three weeks under alterative applications, the induration remaining.

From the first indications of a sore up to the first cutaneous expression of the disease, we have a period of invasion of nine weeks. The malaise, cephalalgia, and slight elevation of temperature which preceded the eruption about a week, and which were mistaken for biliousness, were plainly due to the primary syphilitic fever.

This patient had a gonorrhœa and orchitis two years previously.

We sometimes learn from the mistakes of others. If the report of this interesting case will teach my medical brethren to be on their guard, or throw any light upon the early recognition of the extra-genital chancre, it will perhaps have served a useful purpose.

Uses of *Viburnum Prunifolium*.—Dr. D. A. Richardson, of Oscheola, Ark., in a letter to the *Mississippi Valley Medical Monthly*, August, 1884, says, for six years he has been taught that this is a valuable remedy, the indications for the use of which are *almost* of daily occurrence. "My first knowledge of its use came from Dr. C. A. Lindsley, then Professor of Materia Medica in Yale College, and Dr. M. D. Mann, Lecturer on Gynæcology, in the same institution. I, together with the majority of physicians (in the East at least) have used it freely and frequently. Dr. Dunavant, with whom I am at present associated, also tells me that he has used it in a variety of cases for some time. It is extremely valuable,

not only in 'uterine disorders characterized by loss of blood,' but also in *scanty* menstruation caused by debility or lack of 'tone' of the uterine tissues. In such cases its action is precisely the same as in the case spoken of by Dr. Evans, viz.: 'as a tonic.' Combined with belladonna, it is useful in dysmenorrhœa with either profuse or scanty flow. It is also valuable as an anti-spasmodic and tonic in cases of threatened abortion, while as an aid to involution of the uterus after delivery it is without a rival except ergot of rye or corn. It has been given in large doses to produce abortion. A reliable physician was told by a lady friend that she had procured several abortions by its use. I have found it useful in some cases of diarrhœa and intestinal hemorrhage, but not of so much value in these cases as coto bark and its preparations. It has also been recommended as a diuretic, its action being probably that of a stimulant to the capillary circulation of the kidneys, like ergot or digitalis. In fact, it may be and is prescribed in any case in which ergot is indicated, by many physicians of high repute. I can cheerfully and truthfully say with Dr. Evans, that 'it is a valuable remedy in some diseases of women,' and will go a step further and add, in some not peculiar to the one sex, but common to both."

Management of the Third Stage of Labor.—From the *Canadian Practitioner*, July, 1884, we extract the following, by Dr. George A. Tye, Chatham, O. He says: The object of this paper is chiefly to discuss Credé's method, a method lately warmly advocated by some prominent obstetricians. Unless properly limited it may bring disappointment to the practitioner and disaster to the patient.

The third stage, like the preceding ones, is a strictly physiological process and requires no assistance so long as the conditions are normal.

When, however, the conditions are pathological, then alone is interference justifiable.

When the uterus has been for a length of time vigorously engaged in the previous stages it is naturally more or less exhausted, and before commencing the third stage requires a period of rest.

After this rest contractions occur spontaneously; at first gentle, then gradually increasing in power; each contraction separates a portion of the placenta, and simultaneously closes the sinuses, and finally expels the whole contents of the

uterus. The efforts thus begun continue till all danger of hæmorrhage is past.

This is nature's method and can never be improved by art. During this process the accoucheur is only a watchman, keeping the hand over the uterus, to warn him should internal hæmorrhage occur, and to convey to him the nature of the uterine action.

It is the practice of some to interfere:

By traction on the funis;

By external pressure from all sides towards the os.

The latter process, known as Credé's method, has been taught and practiced for the last twenty-five years or longer. These methods are both unnecessary, because the process can be accomplished without their aid; they are both wrong, because they tend to deliver the placenta prematurely, that is, before sufficient contraction has set in, and therefore favor *post partum* hæmorrhage. The method of traction on the cord being rarely practiced requires no comment.

Credé's method is taught, considerably practiced, and lately warmly advocated, and that in all cases. When Credé's plan is, practiced the placenta may be separated by the combined forces of the uterine effort and external pressure. But it is frequently detached by the external pressure alone, after separating a portion of the membranes which are liable to be retained. The placenta acts as a tampon, and as a stimulus while in the uterus, and is of service until nature's *tourniquet*—uterine contraction—is ready.

When the conditions are abnormal, such as strong adhesions, and strong uterine efforts fail to deliver in a reasonable time, then the method of Credé is valuable and will hasten expulsion. These cases are rare. It is the practice of this method in *every* case that is unjustifiable and dangerous.

For ten years I practiced this method and had a large number of hæmorrhages. I was struck by the fact that of all the labors to which I was called and arrived late, flooding had rarely occurred. Cases attended by midwives, who did not interfere, were nearly exempt. These facts caused me to abandon the method and to rely upon the natural process as already indicated, and the result has been most satisfactory and convincing during the last seven years.

Dr. Garrigues, of New York, in a recent paper before the Academy of Medicine, strongly advocated Credé's method. His first statement is that it should be used in *all* cases. Amongst the advantages that he claims for it is the *preven-*

tion of hæmorrhage, but proof of this assertion is not in the paper.

In the discussion that followed, Mundè speaks of Credé's method as a very excellent one, and free from danger when carried out aright, but qualifies it thus:—"When carried too far it might cause too rapid expulsion and favor inertia." He still further modifies it by saying, "The placenta should not be expressed until it is detached, but the uterus should be made to contract by manipulation and separate it, then it could be expressed." This statement is true and sound practice, but it is not Credé's method. When the placenta is once detached it is a foreign body and may be safely expressed, even traction on the cord being admissible.

Dr. Isaac C. Taylor said that he looked upon everything connected with childbirth as a physiological and not a pathological process, and thought we should not interfere with this process. Nature's method was to wait twenty minutes or even an hour. She was fatigued and needed rest. We should not compel her at once to renew her efforts to deliver the placenta. Medical opinion abroad is not now so favorable as formerly. Hotmeyer in a report on Obstetrics and Gynæcology in German, says:—"It is unquestionable that a certain reaction has set in against the method of the immediate expression of the placenta after labor introduced by Credé twenty or thirty years ago. As long as twelve or eighteen months ago various voices were raised, Runge, Dohrn, Schültze, and others, calling attention to the disadvantages of an over hasty expression of the placenta, so that Credé himself has been inclined to again carefully limit the procedure introduced by him. Quite recently the manifold dangers of this method have been very minutely exposed by Ahfield, chiefly in reference to the liability of secondary hæmorrhage and the retention of membranes. At the meeting of German Physicians at Freyburgh, I had the opportunity of hearing Hegar and Freund prefer an almost absolute expectancy to Credé's method."

When uterine inertia exists not due to fatigue, ergot is our most reliable stimulant, in addition to external manipulation. Sometimes the contractions produced by its use are irregular—a portion being contracted, another quite lax, so that the placenta becomes partially or completely encysted, and is not liberated until the influence of the ergot has passed away, or the hand has been introduced to remove it. As a rule, it is best to abstain from its use until the uterus is emptied, then a full dose may be administered to keep up contraction, the hand in the meantime being retained until

its effects are manifest; the patient can then be left in safety, and much done to prevent puerperal fever.

Surgical Uses of Iodoform.--Dr. Hofmakl, at the conclusion of a paper on the surgical uses of iodoform, draws the following conclusions:

1. Iodoform is an excellent disinfectant, and, as a rule, is a painless application to wounds.

2. On account of its very slight solubility it is of little value in complicated wounds of cavities.

3. It does not prevent the occasional outbreak of erysipelas.

4. It is not a specific against scrofulous or tuberculous processes, and develops its healing properties in ulcerations.

5. By keeping wounds fresh and clean it furthers granulation, though it has but little influence on the final cicatrization of the wound.

6. Very thin layers of powdered iodoform do not hinder union by first intention.

7. Pharyngeal and laryngeal diphtheria of children is not benefited more by iodoform than by other antiseptics.

8. In wounds and ulcers of the mouth, rectum, vagina, as well as in easily accessible wounds in the cavities of bones, iodoform in the shape of a thirty to fifty per cent. gauze is an excellent dressing.

9. Parenchymatous injections of iodoform generally cause a great deal of pain, and it cannot be said that they give very good results in fungus diseases of joints and glandular swellings.

10. Iodoform ointments and plasters are often of good service in goitres and chronic swelling of glands, joints and tendons.

11. Iodoform in large quantities is undoubtedly dangerous, and is more productive of good results and less hurtful in small quantities.

12. Childhood is not a contra-indication of its use.

13. The preliminary cleansing of fresh wounds with weak carbolized water before using the iodoform dressing is of no advantage.

14. The healing of scrofulous and tuberculous sores by iodoform does not prevent their return.

15. Iodoform is an excellent means for the thorough removal of disagreeable odors of neoplasms which do not admit of operation.

16. The occasional syringing of suppurating cavities with small quantities of iodoform emulsion will often have a favorable action on the quantity and quality of pus.

17. The introduction of iodoform bougies into the urethra and bladder will often alleviate pain, as also in vesical tenesmus and suppurative conditions of the bladder, and will exert a favorable influence on the conditions of the urine where rapid decomposition takes place.

18. The application of iodoform bougies to long fistulæ of the soft parts is more hurtful than useful, as the fistulæ are stopped up, and the products of decomposition are not discharged. Equally unwise is the filling up of the mouth of the fistulæ with iodoform.—*Med. Digest*.—*Cincinnati Lancet and Clinic*, Aug. 9th, 1884.

Change of Morphia Solutions into Apomorphia.—The *National Druggist*, August 8th, 1884, says: Physicians who have frequent occasion to use morphia hypodermically should remember that if kept in solution for any length of time, this drug is liable to decomposition. One of the products of such decomposition may be apomorphia, as was recently pointed out by Dr. Jennings in the *Lancet*. In this case violent emesis would be set up, which may account for the phenomenon so frequently noticed and reported, of hypodermic injections of morphia being followed by violent vomiting.

Nitrite of Sodium in Epilepsy.—A suggestive note is made in the *National Druggist*, August 8th, 1884, on this subject, which may prove of practical service to some physician who has tried all other popular remedies without success.

The nitrite of sodium is again brought forward as a remedy in epilepsy. In a communication to the *Lancet*, Dr. Baines states that he has had excellent results with it, especially in those cases where the bromides were not tolerated. He reiterates the cautions concerning the use of the drug, warning practitioners not to give it in doses of more than three or four grains, and argues the absolute necessity of a pure article. That the remedy is one not to be lightly used is shown by the experiments of M. Henocque, as communicated to the *Société de Biologie*, and undertaken with the view of determining physiological action of the nitrite. Spectroscopic examination of the blood of animals and individuals to whom it had been administered showed that under its influence the hæmoglobin temporarily lost its power of oxidizing into oxhæmoglobin. This effect passes off by degrees, the corpuscles gradually resuming their functions, and, in time (varying according to the amount of the drug absorbed,) becoming normal.

Book Notices, &c.

A Manual of Psychological Medicine and Allied Nervous Diseases. Containing the Description, Etiology, Diagnosis, Pathology and Treatment of Insanity, with Especial Reference to the Clinical Features of Mental Diseases, and the Allied Neuroses, and Its Medico-Legal Aspects, with a Carefully Prepared Digest of the Lunacy Laws in the Various States Relating to the Care, Custody and Responsibility of the Insane. Designed for the General Practitioner of Medicine. By EDWARD C. MANN, M. D., Member of the New York Medico-Legal Society, etc. With Photo-type Plates and other Illustrations. Philadelphia. P. Blakiston, Son & Co. 1883. 8vo. Pp. 699. Cloth. Price, \$5.00. (For sale by West, Johnston & Co., Richmond, Va.)

This work, written by one of the experts in his specialty, is a first-rate guide for the general practitioner, and is, perhaps, one of the most practical of its kind. He has endeavored to present the subject in both a clinical and a legal light, and in such a manner that it can be readily understood by general medical readers. The trouble with the study of insanity has been, and is yet, that the ordinary physician, believing the subject is too abstruse and complicated for him to fully understand, does not think it worth his while to attack it fairly, and so neglects it in great measure, when the truth is that what few facts are really known pertaining to the matter can be easily taken in and digested after a reasonable amount of application. To present the subject in a manner to invite this study has evidently been attempted by Dr. Mann, and it seems to us that he has, to a considerable extent, succeeded. While not all we could desire, we think the volume is well adapted to the wants of both student and physician. The belief in the fact of jurisprudence and psychology being so closely related as exists in the present day, makes it an absolute necessity that the general practitioner should possess more knowledge concerning insanity than has commonly been the case, and no better evidence of the truth of that statement could be given than the fact that so many monographs and volumes on the subject have been published during late years. There seems also to be an evident progression in the proportional ratio of insanity to the population of civilized countries, and therefore every practical addition to the literature of the subject should be well received. The author of this work has had an experience of years in the diagnosis and treatment of every form of this lamentable affliction, and his advice, we think,

should receive careful trial. We notice throughout the book a very commendable desire on the part of the writer to avoid routine treatment, and to enjoin a study of the individuality of each case that presents itself, which certainly should receive all praise. An addition to the value of the book has been made by a clear abstract of the laws relating to the protection and care of the insane throughout the different States. C.

Diseases of the Throat and Nose, Including the Pharynx, Larynx, Trachea, Œsophagus, Nose and Naso-Pharynx. By MORELL MACKENZIE, M. D., London, Consulting Physician to the Hospital for Diseases of the Throat, etc. Vol. II. *Diseases of the Œsophagus, Nose and Naso-Pharynx, with Index of Authors and Formula for Topical Remedies.* Illustrated. Philadelphia. P. Blakiston & Co. 1884. 8vo. Pp. 550. Cloth. Price, \$2.50. (For sale by West, Johnston & Co., Richmond.)

This is a book long expected and eagerly looked for, because of the distinguished reputation of its author and of the almost perfect and faultless character of the first volume, issued about four years ago. Now, that we have it before us, we find no room for criticism, and are wanting in words of praise. The ground it covers is so thoroughly surveyed; every nook and corner so perfectly investigated, that it leaves little to be desired. It is the labor of years and result of close observation by a master in his special work. He has gleaned all that is good in the writings of others and added it to his own vast experience.

The amount of study and research exhibited by this volume is wonderful, coming from a man so much occupied in daily practice. Nearly one-half of the book is taken up by a treatise on the œsophagus, absolutely exhaustive of the subject. The balance is devoted to the nose and naso-pharynx, giving us the most perfect treatise in the language on the diseases and abnormalities of these cavities. Some of the articles have been published in another shape, *e. g.*, we have read the chapter on "Adenoid Vegetations of the Naso-Pharynx" in the "*Annales des Maladies de l'Oreille, du Larynx, etc., etc.*"

It is useless to recommend the book to specialists who have so impatiently awaited its coming, and who know its author so well; but we would say that no medical library could be complete without it; that it is equally valuable to the student or practitioner, and that either as a text-book or book of reference it is beyond price.

Our only regret is that we have to wait on the continuance of this invaluable work, *i. e.*, the part relating to "Diseases of the Neck," which will appear later as an appendix.

Excessive Venery, Masturbation and Continence. By JOSEPH W. HOWE, M. D., Late Professor of Clinical Surgery in Bellevue Hospital Medical College, Visiting Surgeon to Charity and St. Francis Hospitals, etc. New York. Bermingham & Co. 1884. 8vo. Pp. 299. (From Publishers.)

This volume is made up from a course of lectures delivered before the class in the Medical Department of the University of New York, on the subjects indicated by the title. Together with this the large hospital and private experience of the author has been drawn upon, and in addition, the methods of treatment employed by the best authorities in this country and Europe are given, making the work a complete book of reference on this subject. We have noticed a particular squeamishness on the part of some reviewers in noticing this volume, as if the subject should be kept out of sight, even among professional men. We can hardly agree with this opinion, for we believe that teaching of this kind is too rarely met with to be frowned down by what Chas. Reade classed as "prurient prudes." The question, does the vice of excessive venery and masturbation exist, we presume would be answered in the affirmative by every physician of any extended experience. That being the case, it appears to us that we should welcome the sound advice upon the subject given us by Prof. Howe, and not speak of his work as we should of a salacious romance. No one, we think, can possibly take issue with the talented author on the points he raises as to the diagnosis and treatment of the conditions considered here. His views and teaching on sexual hygiene are certainly acceptable to the profession. The chapters on the results of sexual excess, contain not only his belief in the matter, but the opinions of every authority who has written on the subject.

The chapter on the classification of cases for treatment should be read by every general practitioner, and is possibly one of the best in the book. The treatment of spermatorrhœa, impotence and allied disorders, includes the methods employed by such men as Gross, Van Buren, Post, Hamilton, Bartholow, Acton and others who have enjoyed special advantages for the study of such conditions of disease. The book is one which should be kept at hand for reference, and for that purpose it is invaluable. C.

Eczema and Its Management. By L. DUNCAN BULKLEY, A. M., M. D., Physician to the New York Skin and Cancer Hoapital, Dermatologist to the Manhattan Eye and Ear Hospital, etc. Second Edition. New York and London. G. P. Putnam's Sons. 1884. 8vo. Pp. 344. Cloth. Price, \$3.00. (For sale by Messrs. West, Johnston & Co., Richmond, Va.)

When this volume appeared in its first edition several years ago, we gave it such meed of praise as we thought it fairly deserved, saying then, as we do now, that there is no work on the subject superior to it in the English language. Then, we felt that the talented author had full ground for belief in his capability of teaching on matters pertaining to eczema, as his book was based on the observation and treatment of three thousand cases, and now having added the experience obtained from the examination of five hundred more, it may well be thought that his power as a teacher has not deteriorated. In fact, we know of no book relating to one particular disease, that is at once so readable and valuable as the one under consideration. It is a work not meant so much for the use of the dermatologist as the general practitioner of medicine, and the most careful directions have been given by Dr. Bulkley, by which to meet the many difficulties so frequently seen in the diagnosis and treatment of this peculiar disease. Contrary to the Vienna school, he takes the ground that eczema is not a disease of local pathology, but one which is in itself truly constitutional, and his treatment therefore is only local, according to the symptomatology, being mainly directed to the blood dyscrasia. To any physician desirous of posting himself fully upon everything relating to this disease we recommend the purchase of this volume.

C.

The Laws of Health. Physiology, Hygiene, Stimulants, Narcotics. Illustrated. By JOSEPH C. HUTCHISON, M. D., LL. D., Author of a Treatise on Physiology and Hygiene, Ex-President of the Medical Society of the State of New York, etc. New York. Clark & Maynard. 1884. 12mo. Cloth. Pp. 223. (From Publishers by mail.)

This little manual, intended for educational institutions and general readers, presents clearly and concisely the knowledge of the day in reference to the laws of health, with especial reference to the effects of stimulants and narcotics, the main idea being to furnish matter based upon physiology, etc., to prove the bad consequences of indulgence therein. The volume is especially fitted for use in the higher grades of boy's schools, and for such employment we can safely ad-

vise it. A pronouncing and explanatory glossary has been inserted at the end of the book to enable the student to properly understand the few technical terms necessarily employed, and the series of review questions given seem to cover the required ground. Works of like nature should be found in every Grammar School for the purpose of teaching "the proper study of mankind," and the book before us seems an excellent one of the kind. C.

The Diseases of Children. A Hand-book for Practitioners and Students. By ARMAND SEMPLE, B. A., M. B. (Cantab.); M. R. C. P., London. Physician to Northwestern Hospital for Children, Author of "Aids to Medicine," etc. New York and London. G. P. Putnam's Sons. 1884. 12mo. Pp. 352. Cloth. Price, \$1.75. (For sale by Messrs. West, Johnston & Co., Richmond, Va.)

The author believes that there is such a "specialty" as Diseases of Children, and so believing, consistently endeavors to show wherein this special branch must lie. We think that any reader of Dr. Semple's affirmative plea on this subject in the preface will at least give him the credit for an honest opinion in the matter, even if not fully convinced. As to the distinctive features of infantile ailments, the author has presented them faithfully and with most scrupulous care, and has paid especial attention to matters pertaining to the very young. His style is plain and concise, no attempt at "fine writing" having been indulged in, yet the very consciousness of his language has an elegance of its own. No attempt is made to advance new theories, but the reader will find that well-known or generally-accepted beliefs on certain subjects are here and there put in a new light, which he will be ready to receive with perfect trust. The book is emphatically a practical one, and we recommend it as one of the best of the smaller manuals on the subject of children's diseases published of late years. C.

Post-Nasal Catarrh and Diseases of the Nose Causing Deafness. By EDWARD WOAKES, M. D., Senior Aural Surgeon and Lecturer on Diseases of the Ear, London Hospital, etc. Illustrated with Wood Engravings. Philadelphia. P. Blakiston, Son & Co. 1884. 12mo. Pp. 224. Cloth. Price, \$1.50. (For sale by Messrs. West, Johnston & Co., Richmond, Va.)

The study of this subject, although usually relegated to the aural surgeon, is one which should be more regarded by the general practitioner, and although the work in question is intended mainly for the specialist, we would advise the

practising physician to read it. The reputation of the author upon the subject of nasal and aural disorders is so well known that it is hardly necessary to speak of the high value attaching itself to his writings, and we shall hardly do more than note a brief outline of the work. Dr. Woakes founds his studies of the subjects mentioned in this book upon purely a physiological basis, and making it plain that these lesions depend upon certain modifications of nutrition in the regions involved, his principles of treatment to the functional alterations are logically successful. The chapters on the etiology of catarrh and the mechanism of "taking cold," are especially interesting and profitable to read. He clearly describes the varying degrees of *mobility* which characterize the ganglia of the sympathetic chain, showing plainly how the different after-effects of a chill are all dependent upon one certain nutritive modification. It is difficult to lay the book down when engaged upon these chapters. The diagnosis and treatment of acute and chronic catarrhal troubles are made plain even to those who may lack the experience of the specialist, and the chapters devoted to chronic pharyngitis and pharyngeal disorders are worthy of a more extended description than our space allows us to give. The engravings, although not frequently met with, are well illustrative of the text, and altogether we can recommend the perusal of this work to those of our brother practitioners who desire to procure the latest and best information on the subject of catarrhal affections. C.

The Travels of a Doctor of Physic. By WM. H. TAYLOR, M. D., Richmond, Va. Philadelphia. J. B. Lippincott & Co. 1871. 12mo. Pp. 373. Paper. Price, fifty cents. (For sale by Messrs. West, Johnston & Co., Richmond, Va.)

This is a new, cheap edition of Dr. Taylor's celebrated book of travels, and its small cost enables any one to procure it without trouble. To say that we have read it again with pleasure, is to say very little of it. When we purchased and read the first edition of the book over ten years ago, we enjoyed it so thoroughly that we sat up all of one night to finish it, and hardly expected to find the same sense of enjoyment in it the second time at this late day; but pressed for time as all editors and reviewers are, we have conscientiously read every word of it again, and laughed as heartily over it as on the first occasion. It is a book that everybody should read. Brimful of innocent humor, it gives besides that sense of knowledge of the places written of that few

books of foreign travel convey. There is nothing of the "guide book" style about it, but on every page the reader sees the countries visited, with the eyes of a sharp-sighted American citizen, who, though filled with a thorough sense of humor, yet can appreciate all that is good and valuable. It is an admirable example of our true national wit and fun, and although it irresistibly reminds one of Mark Twain, it is not in the slightest degree an imitation of that author. Any reader who admires the easy, witty style of Mr. Clemens, will enjoy to the utmost Dr. Taylor's book of "Travels." It is one of the few humorous Southern-written books, and every reader of our pages should purchase the work if he desires to enjoy an occasional hour's relaxation from the annoyances of practice. Any one who sends to the above-mentioned firm of booksellers for a copy will feel more than repaid on its perusal.

C.

The Pathology, Diagnosis and Treatment of Diseases of the Rectum and Anus. By CHARLES B. KELSEY, M. D., Surgeon to St. Paul's Infirmary for Diseases of the Rectum, etc. With Two Chromo-Lithographs and Nearly One Hundred Illustrations. New York. William Wood & Co. 1884. 8vo. Pp. 416. (For sale by Messrs. West, Johnston & Co., Richmond, Va.)

In 1883, in "Wood's Library of Standard Medical Authors," the basis of this work appeared, and met with universal praise, it being at that time, the most complete American work upon the subject. Now, after the increased experience naturally gained by a specialist in the two years since the first book was written, the author feels that he has the right to place this before the profession as a more thorough and elaborate manual upon diseases of the region named. Every attempt has been made to bring the teaching upon each branch of the subject fully up to the present time; not only have new chapters been added, but portions relating to vexed questions of pathology, and differing plans of treatment have been more fully considered than was possible in the smaller volume before published. As an instance of this we may cite the chapter on "Rectal Hernia," which has been added entire. New illustrations have been introduced, and we think references to later literature on the different points considered are more frequently met with.

The rules given in the third chapter regarding examination, diagnosis and operation, are complete, and when we remember the frequency with which the physician is called upon to give relief for some obscure rectal trouble, we can

easily see their value. In reference to hæmorrhoids, the author, while giving due praise to Allingham's operation for their cure [by ligation], is evidently not in favor of it in most cases.

He prefers the method of incision for the treatment of external piles, and carbolic acid injections for the internal variety. In the latter method he thinks there is no particular reason to fear embolism (the main objection usually offered against this form of treatment), as in his own practice the results have been uniformly satisfactory in this respect, and the ulceration, which is occasionally a sequence, he has had no trouble in healing. He does not believe in injecting strong solutions of the acid, on account of the danger of sloughing, about a five per cent. solution in glycerine and water being usually the best. Of this strength he injects five drops on the average, by means of the ordinary hypodermic needle. Dr. Kelsey does not repeat the injections more than twice a week, but thinks that the interval might be shortened if necessary, but in the latter case the patient should be confined to the house. He does not, as a rule, use Smith's method [clamp and cautery], except in cases of prolapsus. The chapters on malignant and non-malignant growths and ulceration of the rectum are very full, and offer one of the most reliable guides upon the subject we know of. The chapter relating to hernia of the rectum is especially full in references and cases and deserves careful perusal. That portion of the book which treats of impacted fæces, pruritus ani, etc., cannot fail to be valuable to the general practitioner, on account of the thorough teaching concerning diagnosis and treatment, and no safer preceptor in such matters could be found than Dr. Kelsey. The illustrations are equal to the text and are fully explanatory of the latter. The work has become a standard upon the subject it treats of.

C.

A Manual of Medical Jurisprudence. By ALLAN McLANE HAMILTON, M. D., Consulting Physician to the Insane Asylums of New York City. With Illustrations. New York and London. Bermingham & Co. 1883. 8vo. Pp. 386. (From Publishers.)

This work, complete in one volume, is presented as "an elementary treatise and book of reference for lawyers and doctors," and, as far as we are able to judge, seems to thoroughly fulfill its object. No attempt is made by the author to cover, even in a superficial way, the whole sub-

ject of medical jurisprudence, but he has confined himself mainly to those conditions of the nervous system which at the present time so often are causes for action in court. That Dr. Hamilton is fully competent to do this, all who know of his reputation as an expert in this class of cases are perfectly aware, there being hardly a medico-legal question of any importance ever coming up in a New York court based upon such conditions now-a-days, without his being called upon to testify on one side or the other. The book under consideration is one which must be of service not only to the specialist, but also to the general practitioner, as there is hardly one of the latter class that is not at some time called upon in private practice for his opinion as to the importance of a lesion of the nervous system. One of the important points made by the author is to the effect, that homicidal or suicidal mania is seldom of sudden development, as is so often stated, but is, in the majority of cases, preceded by peculiar symptoms of cerebral disturbance, which should be more frequently recognized. In the chapter relating to suicide, Dr. Hamilton gives some most valuable hints for the determination of the fact whether the injuries on the body found are self-inflicted or the contrary. We must say that this book occupies a place in medical literature which has never before been so well filled. C.

PAMPHLETS, REPRINTS, ETC., RECEIVED for which we have no room for fuller notice, etc.; but most of which can be obtained by enclosing a letter stamp for pamphlet to the respective authors named.

Transactions of the Maine Medical Hospital. 1883. Volume VIII.—Part 1. Pamphlet. 8vo. Pp. 190. Dr. O. A. Horr, Lewiston, President; Dr. Chas. D. Smith, Portland, Secretary. [The Transactions of this Association are always of practical value. The present volume is of more than usual interest in the number and importance of its papers.]

Study of Some Points in the Physiology of Digestion. By C. L. DANA, A. M., M. D., New York, N. Y. [This reprint of twelve duodecimo pages from the *Boston Medical and Surgical Journal*, September 14th, 1882, is in great part based on original experiments and observations, and should be considered authoritative from the known ability, caution and accuracy of record of the writer.]

Three Cases of Rupture of the Uterus. By HENRY P. WENZEL, M. D., Milwaukie, Wis. [Reprint of eight pages from the *American Journal of Obstetrics*, April, 1882. Be-

sides the reports of the three cases, this paper gives a condensed review of the subject, and sums up with conclusions that are well founded and useful to physicians generally.]

Clinical History and Exact Localization of Perinephritic Abscesses. By JOHN B. ROBERTS, M. D., Philadelphia, Pa. [Reprint from *American Journal of Medical Sciences*, April, 1883. Pp. 19. On page 18, the author tabulates the more important deductions based upon his anatomico-clinical study, which will be found of great value in localizing the disease, and in determining the point for operations.]

Elephantiasis Arabum in the Samoan Islands. By ARTHUR C. HEFFENGER, M. D., Passed Assistant Surgeon, U. S. Navy. 12mo. Pp. 7. [A good descriptive paper and one of historical value.]

Address in Ophthalmology. By JULIAN J. CHISOLM, M. D., Baltimore, Md. Presented to the American Medical Association, May, 1884, and reprinted from the *Journal of the American Medical Association*, June 14th, 1884. Pp. 19. [A paper full of practical suggestions as to cautions and advice. All of Dr. Chisolm's writings are useful, so far as we have seen them.]

Combined Intra-Uterine and Extra-Uterine Twin Pregnancy; with an Analysis of Twenty-four Cases, and Full Extracts from the most Important Cases. By B. B. BROWNE, M. D., Baltimore, Md. Pp. 19. [Reprint from Vol. VI. *Gynecological Transactions*, 1882.]

Editorial.

Medical Society of Virginia.—The Fifteenth Annual Session of the Medical Society of Virginia will convene at Rawley Springs, Rockingham Co., Va., Tuesday, September 9th, 1884. The generous proprietors of the hotel at this popular "Virginia Springs" have agreed to make no charge for board against the members and delegates who may attend, and most of the railroads in the State will, undoubtedly, offer reduced rates over their respective lines of travel. Thus the expense will be small. The session will quite certainly be over on Friday of the same week—if not on Thursday. Hence the time lost from home will be brief.

But the necessity for a large and representative attendance of the Virginia doctors must be apparent upon mention of

the fact that at this session three doctors from each of the ten Congressional Districts of the State will have to be nominated by the Society for confirmation by the Governor who are to compose the State "Board of Medical Examiners." Since the organization of the Society in 1870 to the present moment effort after effort has, almost yearly, been made to secure, by legislative enactment, the establishment of such a Board. While the bill was fingered by politicians, in some measure, so as to interfere with the true purpose of the plan, still the law as it stands is better than no law on the subject. It devolves upon the Medical Society of Virginia—regardless of political opinions or other extraneous influences—to prove to the people of the Commonwealth that the object of the earnest efforts so frequently made by the Society with former Legislatures was intended for their good as well as for the protection of professional reputation. The Society must determine on straight-forward, unprejudiced men to compose the Board of Medical Examiners. Cliques and caucusses must be broken up and frowned down in scientific assemblages. But *each* doctor, as he comes to the Society, ought to feel that he has a big responsibility resting upon him—that he has to give a vote for a truly representative and competent man to occupy a place upon the Board of Medical Examiners. The position is a responsible one—not loaded with honors nor emolument—but one which, if faithfully filled, will redound to the good of the people and the profession.

In addition to this important business consideration, which will have to be carefully and bravely met, the scientific features of the session will be of interest to doctors. Besides the President's Address by Dr. J. Edgar Chancellor, of Charlottesville, Va., the following are expected to report: Dr. Hugh T. Nelson, of Charlottesville, Advances in Anatomy and Physiology; Dr. H. D. Kerfoot, of Berryville, on Chemistry, Pharmacy, Materia Medica and Therapeutics; Dr. Samuel B. Morrison, of Brownsburg, on Obstetrics and Diseases of Women and Children; Dr. J. S. Dorsey Cullen, of Richmond, on Surgery; Dr. E. W. Rowe, of Orange C. H., on Practice of Medicine; Dr. Herbert M. Nash, on Hygiene and Public Health; Dr. Benj. Blackford, on Ophthalmology and Otology, and Dr. John Clopton of the Eastern [Va.] Lunatic Asylum at Williamsburg, on Psychology and Neurology.

We hear that some visitors of eminence in the profession from other States will be in attendance prepared to contribute

papers and to enter upon debates on medical and surgical subjects. The Virginia Society has always extended a hearty welcome to such visitors.

In the way of *volunteer* papers we have heard of several in preparation, but we are at liberty to announce only the following: One by Dr. Hunter McGuire, of Richmond, on "Obstruction of the Bowels;" one by Dr. Wm. H. Coggeshall, of Richmond, on "Rectal Etherization," and one by Dr. Alexander Harris, of Jeffersonton, Culpeper county, on "The Medicinal Properties and Therapeutic Application of Fauquier [Va.] White Sulphur Springs." Dr. R. I. Hicks, of Casanova, Va., will deliver the Annual Address to the Public and Profession—his subject being "Hygiene in Relation to the Private Family." We presume there are other papers in preparation of which we have not heard. "Malarial Fever" is the subject selected for *general discussion*, and Dr. R. B. Stover, of Richmond, was appointed to open the discussion.

Mellin's Food.—At this time of year every physician has to consider what are the best means at his disposal to combat the diseases to which infants are especially liable, and it is a requisite to determine not only upon what are the best therapeutic means he can use, but also to what extent he can trust to hygienic preparations.

The improper food of the infant is often at once the cause and the prolongation of that most dreaded disease—cholera infantum—and the practitioner, especially if living in a city, is constantly called upon to correct some one of the many disorders of digestion found in nursing children due to this same source.

In cases where cow's milk is used, one finds often the milk too poor, and occasionally in certain instances too rich. It may have come from a cow herself a victim to disease; it may be adulterated by the milkman; it may be contaminated by peculiarities of pasturage; and last but not least, foul cans in which it is kept or conveyed may load it with poisonous germs. In cases where the mother is nursing the child, a slight degree of impropriety in her diet may cause severe entero-colitis in her charge. A healthy food must be rich in true heat-giving property, and be comparatively, if not entirely, free from starch elements. Mellin's Food seems to meet every indication, containing as it does so much of the nitrogenous and phosphatic principles necessary to the tissue growth of young children. Physiologically speaking, it is

one of the most scientific preparations in the market, and may be relied upon to replace milk whenever it is desirable that the latter should partly be dispensed with. In those cases where it is best not to dissolve the Food in milk, and we have met with many such, we have found that mixing it with warm water alone will answer every purpose for a few days until the stomach has regained its healthy tone. We have nothing that is the exact analogue of mother's milk except Mellin's Food, and it is without doubt *the* baby's food. In summer, especially, the profession cannot afford to be without this valuable infant diet.

Virginia Medical College Catalogue.—We have received the announcement of this College for 1884-5, and after a careful examination of its contents we are surprised to find that no mention is made of the Emeritus Professors recently elected by the Board of Visitors. As far as we can remember it has been the custom of every college to head the list of its professors with the names of those who have received this honor. It certainly can not be possible that this State institution is ashamed to place in a conspicuous position such names as those of Drs. Hunter McGuire, F. D. Cunningham, J. B. McCaw, and Otis F. Manson? Every one of these gentlemen have more than a State wide reputation for teaching, and the very fact of announcing that such men had been professors in this school would add to its reputation. Was such omission accidental?

One thing in this catalogue we gladly take this opportunity to praise. We find no such statement as lowered the standing of this college in last year's announcement. Then they made a plain, outspoken offer to receive, *free of charge*, a student from each senatorial district of this State. In the pamphlet before us there is no such offer to throw open the doors of medical education without pay. We can fully approve of this endeavor to stem the tide of free medical tuition. No college can secure or keep either reputation or support that attempts to adapt the "free school system" to medicine. Let the Medical College of Virginia go on in its good work of correcting such abuses, and it may be sure of having the support not only of this, but of every reputable medical journal in the land. Now that this school no longer accepts free students, it has taken a long stride toward prosperity, and we can confidently look forward to the future when the attending classes will be so large that the profession of the State may point with pride to this city as a successful centre of medical teaching.

Beef Peptonoids.—Prof. John Attfield, F. R. S., F. I. C., of London, and Dr. Stutzer, of Bonn, Germany—both eminent chemists—have recently furnished analyses of this valuable and popular physiological remedy or food, as prepared by Messrs. Reed & Carnrick, of New York, and they agree with remarkable exactness as to its chemical composition. We append a table of the results of their investigation :

	<i>Attfield.</i>	<i>Stutzer.</i>
Albuminoids (containing nitrogen).....	69.25	70.29
Fat.....	10.71	11.45
Sugar, including a trace of starch }	9.50	.....
Dextrine (milk sugar)..... } .....	.....	10.75
Phosphates, equal to bone phosphate }	3.01	.....
Other mineral substances..... }	2.61	.....
Salts..... } .....	.....	5.90
Moisture.....	4.92	.....
Starch.....	.....	1.35
Cellulose.....	.....	.26
	<hr/> 100.00	<hr/> 100.00

“Beef Peptonoids” is composed of dry lean of beef, one-third; the solids of milk, minus most of the fat, one-third; the gluten of wheat, one-third—the beef being partially digested or peptonized. Practically, this food is readily soluble in peptonized fluids, proving that it is easily digested when taken in the stomach. Its thorough state of dryness fits it for keeping in any climate. Prof. Attfield says: “It is by far the most nutritious and concentrated food I have ever met with.” Such a palatable and assimilable article of food, he says, he has never before known to be offered to the profession. The flavor and odor are exceedingly pleasant.

Dr. Stutzer states that “if compared with other foods in the market, the result would be as follows: *Nitrogenous nutritive matter in beef peptonoids*, 70.298; in caviar, 26.00; in beef, 20.00; in fowl, 18.00; in mutton, 18.00; in eggs, 13.00; in bread, 8.00; in milk, 4.00; in Liebig’s Extract of Meat, 5.00; in potatoes, 1.00.” He pronounces Beef Peptonoids to be “a most valuable and easily digested nitrogenous food for invalids and convalescents”—a statement which is corroborated by the general experience of practitioners who have used it.

Pacific Medical and Surgical Journal.—We notice the fact that this sterling monthly, published in San Francisco, Cal., is to unite with the *Western Lancet*, of the same city. The junior editor of the former, owing to other engrossing duties will resign his position, which, on the new publication, will be taken by Dr. Whitwell, heretofore editor of the last

named journal. Under the editorial and business management of Drs. Henry Gibbons, Sr., and Whitwell, it is fair to presume that the new monthly will be the equal, if not the superior, of either of the two old journals. The Pacific coast has now one of the best medical publications in the country.

Cholera.—The later reports from Southern France show plainly that this terrible disease has passed the highest point and is rapidly declining in virulency, the latest cases being mainly among those to whom the refugees from Marseilles fled. It is with a feeling of thankfulness that the world finds Dr. Koch mistaken for once, his prophecy that the epidemic would spread this year over all Europe not having proven correct. While we of this country find that our dread of its approach to America was apparently without grounds, yet there is no doubt but that the cleansing given to several of our cities in view of that fear will be of great benefit to their citizens. There is now little or no possibility of the disease making its appearance on the Western Continent this year, but it behooves those in authority not to forget the lessons taught in 1865-6. Cholera appeared at the New York quarantine station in the Fall of the first named year, but got no further, and was supposed to be stamped out, but in the first warm days of the succeeding Spring it broke out with great virulence in New York and Brooklyn. We could then plainly perceive the value of clean streets and correct hygiene, for although sporadic cases occurred in all parts of the two cities, the deaths were almost if not entirely confined to certain localities where the common habits of cleanliness had not been practised by the citizens, and where, during the Winter, great piles of frozen filth and garbage had remained for weeks at a time. When the Spring came the disease came with it, and the thorough cleansing the cities then had, although undoubtedly limiting the spread of the epidemic, was too late to save hundreds of lives. With this terrible destroyer to contend with it is hardly possible to over-estimate the value of early action in the matter of cleanliness.

The S. D. Gross Professorship of Pathological Anatomy.—American surgery has had no better exponent than Samuel Gross; none so honored abroad and at home by institutions of learning; none more revered by his associates and his pupils. His long and brilliant professorial career deserves the perpetuation of his name in close association with medical tuition.

In furtherance of this object, the Alumni Association of Jefferson Medical College has inaugurated a movement to secure, in some medical school, the endowment of a Memorial Professorship, to be designated The S. D. Gross Professorship of Pathological Anatomy.

The profession at large, the personal friends of the late Professor Gross, and others interested in elevating the standard of medical education, are cordially invited by the undersigned to participate in this graceful recognition of conduct and services which have largely helped to establish the high standard of excellence to which surgery has attained throughout the United States, and served so much to dignify the repute of American Medicine.

Contributions may be sent to Dr. R. J. Dunglison, Treasurer, lock-box 1274, Philadelphia P. O., and will be acknowledged in the columns of the *Medical News* of Philadelphia.

[Signed.] D. Hayes Agnew, M. D., Chairman; J. M. Barton, M. D., Secretary, 1344 Spruce street, Philadelphia; Drs. D. Hayes Agnew, Samuel Ashhurst, Wm. B. Atkinson, Roberts Bartholow, J. M. Barton, J. Solis Cohen, J. M. DaCosta, R. J. Dunglison, N. L. Hatfield, I. M. Hays, P. J. Horwitz, Wm. Hunt, Joseph Leidy, R. J. Levis, J. Ewing Mears, S. Weir Mitchell, Geo. R. Morehouse, Milton B. Musser, Andrew Nebinger, Theo. Parvin, Wm. H. Parish, Wm. Pepper, W. S. W. Ruschenberger, Henry H. Smith, Alfred Stillé, Wm. Thomson, Laurence Turnbull, Wm. H. Warder, J. C. Wilson.

To the Medical Profession of Virginia:—We beg leave to call the attention of the Medical profession of Virginia to the foregoing circular, feeling satisfied that they will deem it a privilege to contribute to this fund and assist in the movement to honor the memory of "that great and good man," Dr. Samuel D. Gross.

Contributions from Virginia may be sent to Dr. Hugh M. Taylor, 623 E. Franklin street, Richmond, and will be acknowledged promptly by him, as will also be done by the *Medical News* of Philadelphia.

Drs. Hunter McGuire, Richmond, Va.; John Herbert Claiborne, Petersburg, Va.; James D. Cabell, University of Virginia.

Is this Cholera?—We notice an Associated Press dispatch, under date of August 20th, from Chicago, going the rounds of our daily papers, which is exciting some curious

comments both by professional men and the laity. It is as follows:—"The *Daily News's* Des Moines (Ia.) dispatch says: Cantrell, a village of two hundred and fifty inhabitants, in Van Buren county, is being scourged by a very fatal disease, which is believed to be a violent attack of gray or bloody flux, though some of the physicians pronounce it cholera. The disease comes on with the cramps, succeeded by bloody discharges and spasms. The deaths are one in every four attacked. Thirty-two persons were sick Monday and ten deaths had occurred. Three died Monday night—two children and one old lady. The disease has been increasing for the past two weeks. At Wilton, five miles west, one death had occurred, which the physicians ascribe to cholera. The neighborhood is not in the usual line of travel."

This description does not conform to that usually given of cholera in the text books. It seems to be of local origin, and at this late season of the year we cannot fear that the disease will be wide spread or that it will become epidemic, in any true sense of the word, even if it were proven to be cholera.

We will look for further reports from this local scourge. No part of the records we have indicate that the outbreak has been carefully studied, in a scientific sense, or that post-mortems have been made. It is due to the country at large that earnest efforts should be made to ferret out the history and the pathological state of every suspicious case. Otherwise, on the one hand, an unnecessary panic might arise, or, on the other, those who do not fear an epidemic this year in the United States might be unwisely incautions in their observations and in their advice to patients. Every physician, at such a time as this, should serve as sentinel on the watch in order that he may give due warning on sight of the enemy that threatens attack.

A Physician in Jail for Murder.—Dr. S. G. Allen, Jr., a finely educated and prominent young physician, son of one of the most prominent practitioners in the State of Vermont, visited Boston last month, and while in that city indulged himself with a spree. In the of course his day's sport he became engaged in an altercation in a bar room, and after threatening and being threatened by the party with whom he was quarreling, he finally drew a pistol and fired a shot which proved instantly fatal to his unfortunate opponent. The act was due no doubt to his intoxicated condition as his reputation at home had been excellent. He was arrested and is at present confined in prison, charged with murder.

The Weekly Medical Review,—of Chicago and St. Louis has changed its Editorial staff. Dr. Julius Wise of St. Louis has retired and Dr. Robert Luedeking succeeds him.

Sir Henry Thompson,—is said to have originally been a draper's shopman, after which he became for a short time a field preacher. His natural bias led him to attend medical lectures and devote himself, heart and soul, to the study of medicine and surgery. He became a bachelor of medicine in 1851, and was elected a Fellow of the College of Surgeons. He was for some years physician to the king of Belgium, on whom he performed lithotomy fifteen or sixteen times, receiving as a fee the sum of three thousand pounds. Apart from his ability as an orator, he was an accomplished painter and a frequent contributor to the Royal Academy exhibitions.—*Amer. Med. Weekly*.

Sir William Jenner,—of London, commenced life as an apothecary in a small back street in London, and for a long time the battle of life fell hardly on him. He worked with rare energy, and after obtaining the M. D. degree and being elected a Fellow of the College of Physicians, was appointed Physician to University College Hospital. He later became physician to the queen and the prince of Wales.—(*Amer. Druggist*, July, 1884.

Sir William Gull,—when a boy, was engaged to sweep out the surgery and dispensary of Guy's Hospital, of which he later became the consulting physician. He acquired the largest fashionable practice of any physician in Europe.—(*Amer. Druggist*, July, 1884.

The *Weekly Drug News* tells the following: "A physician called for some bromine at a Hudson River town a short time since. The clerk opened a can in which the bottle was packed in plaster of Paris. Having made sure that he was right by an examination of the label, he dispensed the required amount of plaster in a paper, which was accepted by the doctor as what he had ordered. Some time after, the medical man re-appeared, and finding the pharmacist in, asked him for some more of the same bromine he had obtained there before, as it worked like a charm." Bright pharmacist and brighter doctor.—(*Detroit Lancet*, August, 1884.

Zoajax.—In the *Weekly Drug News* July 12, 1884, we find an advertisement of this genuine novelty. It is announced as being “the only specific for the fear of lightning ever formulated for the benefit of sufferers.”

This is really a curiosity in the way of drug enterprise, and will probably secure a free notice in the medical journals of the country. Now if the Zoajax company would only get out a specific for the cyclone terror it might find a ready market in certain localities in the West. Or how would it do to manufacture a specific for the apprehension of insolation?

Legislation cannot make a people healthy who prefer, from ignorance or laziness, to live diseased and die prematurely.
—*British Medical Journal*.

Obituary Record.

Dr. Francis B. Watkins, late of Rochester, New York, died at the residence of his sister, Mrs. J. E. Hannah, at Pampins, Va. He was born in Goochland county, Va., in 1815. After his graduation in medicine he resided and practised his profession at Hampden Sidney College, Va., until the Fall of 1865, when he removed to Richmond, Va. Under a flattering call, about 1879, he removed to Rochester, N. Y., where he rapidly gained an extensive and lucrative practice—especially in the line of diseases of females. He was a member of the Medical Society of Virginia from its organization in 1870, and to its *Transactions* as also to the pages of some of the earlier numbers of this *Medical Monthly*, he contributed several papers of practical value.

Dr. Wesley C. Norwood died at his residence in Cokesbury, S. C., on July 15th; aged, seventy-eight years.

Dr. Norwood's name has, during the past twenty years, been well known to the profession in consequence of his discoveries as to the value of *veratrum viride*. Although he did not reap the pecuniary reward which should have been granted him for his labors, yet he had the satisfaction of knowing that he had given to his professional brethren one of the most valuable indigenous drugs in their armamentarium. While not a prolific writer, yet his name occasionally appeared as a contributor to medical journals, chiefly, however, with reference to the value of the medicine referred to.

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Original Communications.

ART. I.—**Water—Some of its Uses and Impurities.** By WALTER A. CROW, M. D., Friendship, Va.

I do not expect to be so fortunate as to present anything particularly new or striking in my elucidation of the subject, neither do I pretend that what I have to offer is to any considerable extent the result of original investigation. But being a willing student and earnest laborer in the domain of practical medicine, I trust that from the reading of this paper and the interchange of thought that may follow, some benefit may be derived by the gentlemen present who may more thoroughly awaken the profession to the vast importance of the subject than I can possibly even hope to do.

If we will reflect but a moment upon the importance of water (H_2O) in the formation, preservation and carrying-out of the normal functions of the human system, we can readily see that it is a subject that should command the most careful and considerate attention of all whose duty it is to act as a common guardian to the health and welfare of the people of his community.

As an element in the make-up of the human body, our modern physiologists tell us that it is present in varying proportions in all tissues of the body. The animal fluids (such as the lachrymal fluid, perspiration, etc., contain little else—986

and 990 parts per 1,000; and in the hardest structures, as the bones, we find 130 parts per 1,000, and even the enamel of the teeth contains two parts per 1,000, as estimated by A. Flint, Jr.

In these structures the fluid is essentially water of composition. In the process of nutrition, the part it plays is no less important, being deposited in the tissues with other nutritive principles. And I should say that all performances of organized structure are necessarily dependent on its presence. If its normal proportions vary in the least in the system, marked symptoms follow. For example, if the watery principles fall below the normal amount, a sensation, known as thirst, results, which leads to a demand for the introduction from without of a supply. On the other hand, if there is too great a proportion of fluids in the system, and consequently a diminution of solid elements, the effect is well known to practical and observing physicians as giving rise to the following train of symptoms: General muscular debility, loss of appetite, dropsies and various other indications of mal-nutrition.

I will not attempt in this paper to go into minute details as to the ordinary uses of water, but will rather confine myself to a few of its uses as a therapeutic agent, and will refer more especially to some of the impurities of water as it is used for *drinking* and *culinary purposes*.

As a therapeutic agent, it is one of the most important when used externally as an antipyretic in acute febrile inflammations. Our German brethren consider it almost as a "sheet anchor"; and not only they but the whole professional world have long since recognized its virtues, and have been applying it in a number of ways. Thus we have the cold, the tepid, the sponge and the shower baths, the wet pack, the douche, etc., as modes of external application for the reduction of temperature for a long list of troubles, such as acute inflammation of the meninges, the lungs, the viscera, etc. In this connection I consider it nothing but just that I should make mention of Kibbe's cot, which has proven to be such a great blessing to suffering humanity—the inventor of which sacrificed his life during a recent

scourge of yellow fever in New Orleans. It is not necessary for me to go into detail as to its construction and advantages, for I take it for granted you all are well acquainted with it.

In surgery, the applications of water are numerous and important. As a dressing for *wounds, contusions and inflamed parts*, it is used by all. I will make mention of but one particular trouble; that is that very painful affliction—a *sprained ankle*. I copy the following from my note-book, from a lecture of Prof. L. A. Sayre, of Bellevue Hospital Medical College, session 1880–81 :

“For this very painful trouble, I find nothing that gives more general satisfaction at the time of the accident than immersing the whole foot in a basin of warm water as hot as the patient can comfortably bear it, and keeping the temperature up by adding hot water until the pain has entirely or nearly subsided, etc.”

As to its efficiency in the relief of neuralgic pain and its use in post-partum hæmorrhage, infantile convulsions and a number of other troubles, I will not consume time in advocacy of its virtues.

Internally.—I shall content myself by stating only one of the effects of water when taken as a therapeutic agent. I mean in *atonic dyspepsia*, or that condition of the stomach in which the peptic glands lack the vitality necessary in furnishing the gastric juice requisite for perfect digestion. For this condition I have never found anything so effectual as the taking of a cup of hot water half an hour before eating, more especially in the morning; the stomach then seems to be coated with a layer of thick tenacious mucus which seems to hinder the presence of the food from stimulating the glands, also rendering the action of the gastric juice upon the food less effective. The rationale of the treatment, I think, is this: It acts in thinning this mucus, and washing out and leaving this receptacle clean for food when taken, and it also acts as a very decided stimulant to the glands. Suffice it to say, that in my short professional experience it has given better satisfaction in this condition of affairs than all the drugs that I have been able to get a patient to swallow.

Impurities.—Absolute pure water (*aqua pura*) can only be

obtained by distillation—the next purest form being rain water, especially that which falls during the latter part of a shower, as the gases, dust, etc., in the air are taken up in the first part of the rain. The water from springs and wells is less pure than rain water, from the fact that as it passes through the crevices of the earth it comes in contact with the various earthy salts and metals which it is capable of dissolving and holding in solution. The best common test for pure water used for drinking purposes is this:—Take a glass of water, and to this add a few drops of a solution of the permanganate of potash. If it retains its beautiful purple color, it is pure, but if decolorized, it indicates an impurity.

Lime.—This is one of the most common impurities, especially in Southwestern Virginia. Its presence may be detected by bubbling carbonic acid gas (CO_2) through the suspected fluid. If lime is present, we get a milky appearance, which is due to the CO_2 uniting with the lime and forming carbonate of lime, but if an excess of this gas is passed through, the water will again become clear. By adding oxalate of ammonia to lime-water, we get oxalate of lime, which is the composition of the mulberry calculi; hence the danger of calculi in those persons who make constant use of strong lime-stone water.

Lead.—This metal is to a considerable extent soluble in pure water, but not so much so in impure water—the most common mode of adulteration occurring from the use of leaden vessels or leaden pipes. The person who habitually takes the first glass of beer or soda water in the morning that is drawn through leaden pipes from a basement will sooner or later get the constitutional effects of lead. It often happens that we get marked symptoms of lead in the system, yet the manner in which it was taken is rendered very obscure. I will briefly relate the details of an interesting case that came under my observation in February, 1883:

In a family living in the country I found both parents and two children, out of three, suffering, as they expressed it, “with a peculiar kind of colic.” I at once suspected the trouble, from the fact that four out of a family of five were troubled just alike and at the same time, a week or more

having elapsed since they first began to notice it. But, on inquiry, they told me there was not a leaden vessel on the place, and that they used water from a spring nearly a hundred yards from the house. It might be well to state in regard to the symptoms, that the colica pictonum was troubling all of them, but I could detect no markings on the gums, the mother only complaining that her wrists were so weak that she could scarcely do anything with her arms or hands. Being so positive that the trouble must be caused from lead, I put them on a treatment of iodide of potash and Epsom salts until I could satisfy myself by an analysis of the urine. I procured samples from the patients, and I copy the following from my note-book: Color (in both), normal; spec. gravity, 1020 (male), 1022 (female); no albumen, and same earthy phosphates. By using the iodine test, I got a positive yellow color (iodide of lead) from the female specimen, very slight from the male; by bubbling sulphuretted hydrogen through, I got a dark discoloration in both, more decided in the female specimen. So my suspicion was confirmed by the examination and tests, but where could the lead come from? I could find no source for it, unless it is the following, which I am inclined to believe: It will be remembered I stated that the spring was some distance from the house, which made it very inconvenient to get water, both on account of the distance and the inclement weather, and I found on inquiry that the family generally brought water from the spring only twice in twenty-four hours, using the water brought in the evening for getting breakfast next morning. It was carried in tin buckets, and allowed to remain in them until used up. I also found that they made use of block tin pans in cooking, such as stewing fruit, etc.

My conclusions were as follows: 1st. It is well known that pure tin vessels are very scarce, and that a large per cent. of lead is used, both in the plating and soldering of our cheap tinware. 2d. That the water was allowed to remain in the vessels a sufficient length of time to dissolve enough of the lead to give rise to the trouble.

I may state in regard to the cases, that the treatment was continued a few days, and with the proper precautions taken

in regard to the water, the trouble passed away, and has never returned.

Mineral Springs.—Iron, copper, potassa, sodium, manganese, magnesian, lithium, alumina, silica, arsenic, nitric acid, carbonic acid gas, nitrogen, etc., are all capable of being held in solution or retained in water and constitute what is known as mineral springs.

Communicating Disease.—It is my earnest belief that in a great majority of the epidemics and endemics which occasionally scourge a community or section of country, if we would examine closely into the sinks, pits, etc., that are used as receptacles for the evacuations and dejecta of patients, thereby becoming filled with disease germs, we would find these germs carried with the fluids as they percolate through the pores of the earth and come in contact with the subterranean branches that connect with our springs and wells, rendering the drinking water perhaps the most common source of communicating disease. Prof. A. Flint, Sr., some years ago, while investigating a scourge of typhoid fever in North Boston, N. Y., found that the drinking water used from a certain well in the town was the prime means of communicating the disease. Not only is that particular disease communicated in this way, but all of that class of diseases that are considered under the head of miasmatic or contagious. Can we stop with that? I imagine some will say no, since Dr. Koch, of Berlin, and a host of other pathological investigators have of late brought so much to light in regard to that much-mooted *germ theory*. Have they not found that these micrococci, bacilli, and a host of little microscopical objects that are infinitesimally small when compared with the magnitude of their names may all flourish and be communicated through the water under favorable conditions? Now, lest I should find myself among the “breakers” in a “tiny boat,” I will not try to venture further, but feel contented by waiting, listening and trying to learn that which the great head-lights, who are fully enthused on the subject may find to be of real practical importance.

In conclusion, I merely wish to say that this sparkling fluid, which God has placed here for the benefit of man and

all living creatures, although it is one of His greatest blessings, yet without proper hygienic measures and sanitary precautions, will prove one of the most common means of communicating disease.

Clinical Reports.

Case in which a Pistol Ball Penetrates the Heart—Death Occurring Fifty-one Hours Afterwards. By THOMAS W. SMITH, M. D., Bethel Academy, Va.

August 21st, 1884, at 4 o'clock P. M., private Ryan, of the United States Artillery, whilst in a drinking saloon three-quarters of a mile from Virginia camp and during a dispute received a pistol wound of the chest.

The following is the medical history of the case up to time of his death, as furnished by Surgeon Wolverton, of the United States Army: The patient was found lying on his left side. His eyes were closed and his face was congested; pulse fifty per minute—soft and weak; respirations, fifteen per minute. External examination revealed a wound of the chest about the middle of the sternum and at the junction of the ensiform cartilage. There was no wound of exit. Physical examination of the chest revealed dullness on percussion over the lower portion of the right lung; at 8 o'clock P. M. reaction was established. He complained of pain in the back but did not locate it; he showed but little muscular weakness. His countenance was natural in appearance. Pulse 120 per minute—irregular and dicrotic. Respiration thirty-five to forty per minute, with an audible groan at the end of each respiration. He was restless and slept but little during the night.

August 22d, 6 o'clock A. M. Pulse 130 and respirations thirty-five per minute; pain located in front of the right side of the chest, with increased dullness of percussion over that portion of the lung. There was a slight oozing of dark fluid from the wound.

August 23d, 6.30 A. M. He complained of but little pain; countenance pale; temperature normal; pulse 115; respiration thirty-five; dullness increased over right lung. At 1.30 P. M., patient ate an egg, drank a glass of milk and took stimulants. At 5 o'clock P. M., pulse 120 and very weak, patient got out of bed and walked across the room; at 7 o'clock P. M. he commenced sinking and died at 8 o'clock

P. M.—fifty one hours after being shot. His mind was clear and free from delirium up to fifteen minutes of death.

The *post-mortem* examination was made by Dr. Alex. Harris, of Jeffersonton, Va., and myself, fifteen hours after death. We found an opening in the chest one third of an inch in diameter, around which the skin was blackened. Upon removing the tissues, there was a small extravasation of blood found in them. The wound was through the sternum, one-half inch above the junction of the ensiform cartilage and one-half of an inch to the left of the middle line of the bone. The sternum was removed, when there was brought to view much infiltration in the tissues of the anterior mediastinum. The ball, deviating to the right in passing through the sternum, penetrated the pericardium, which upon being opened showed the bullet hole in the right ventricle, two and one-half inches from the apex of the heart. Upon removing the heart, we found the ball had passed through the right ventricle up through the auriculo-ventricular opening and out of the posterior wall of auricle. There was about four ounces of clotted blood found in the cavity of the pericardium, and well marked endocarditis. Further examination revealed the fact that the ball had passed through the posterior mediastinum, escaping large blood vessels and nerves, grazing the muscular coat of the œsophagus, striking the side of the body of the ninth dorsal vertebra, piercing the pleura, passing over the ninth rib, and was found in the intercostal muscles between the eighth and ninth ribs, three inches from the spinal column. The pleural cavity of right lung contained about forty ounces of blood, serum and coagulated lymph, the result of hemorrhage and inflammation. The surface of the lower half of the pleura was covered over with thick lymph. The lung was hepaticized at its base. The left pleural cavity contained but a small amount of reddish fluid—the lung being perfectly healthy.

Strychnia for Defective Vision due to Brain Concussion. By
JAMES A. HOPKINS M. D., Milton, Delaware.

During the past Winter my attention was called to the case of a young man seventeen years of age suffering from some defect in his vision—especially when reading or in the inspection of objects near at hand. His general health was good in every respect, with no derangement of the system except in this particular.

In tracing the symptoms of the case back for a short period I found that he had fallen upon the ice, striking the back part of his head, which caused him but little trouble, unless there was some concussion of the brain, which caused the partial blindness of which I speak. I caused him to be placed in a dark room, although the light of the sun caused no trouble or pain. I also caused him to wear blue or green glasses when necessity called him in the light, but to no good. I then gave him cathartics, followed by alteratives, for several days, but to no effect. Then it occurred to me there might be something gained by stimulating the nervous centres, when I ordered him one-thirtieth of a grain of strychnia every four hours, to be continued through each day for one week, when I would see him. At the end of this time, to my surprise, I found him reading a newspaper, for which I reprimanded him. He stated to me he could see and read as well as ever, and that without any inconvenience. I continued the same remedy for three weeks, and have the pleasure of knowing there has been no return of trouble, as he now has perfect sight and health.

Proceedings of Societies.

CHICAGO MEDICAL SOCIETY.

Regular Meeting of August 4th, 1884.

Cholera: Its Etiology, Pathology and Treatment.—This subject was presented by Dr. J. H. Etheridge in an able paper. The following brief synopsis of it is hereby appended, along with the discussion relating to the pathology of the disease, by other members, etc.

The treatment of cholera to-day is changed but very little from what it was sixty years ago. Innumerable attempts have been made to change and improve it, but all have been of little or no avail.

A better idea can be obtained of the new efforts in trials at improving cholera remedies, perhaps, by giving the treatment of three-score years ago, and afterwards giving briefly an enumeration of the various additions to treatment recommended from epidemic to epidemic, than in any other way.

“Calomel certainly comes next in order, and when employed in proper doses, with the association of opium, and

more particularly in the early stage of the disease, seems to be equally effective among natives, as venesection among Europeans is, in arresting its progress.

The outline of treatment alluded to is, to administer twenty grains of calomel and wash it down with sixty drops of laudanum and twenty drops of oil of peppermint in two ounces of water. And to support the warmth by external heat, the hot bath and hot friction, and internally by cordials."

Thus wrote Dr. James Johnson, in 1824, in his classical work on "Tropical Diseases."

The discussion this evening will indicate how much substantial progress has been made beyond that of sixty years ago. Then the idea seemed to be "to start the bile," as the expression was, and afterwards to quiet with opium and support the powers of life. Are we much in advance of this treatment in 1884? *Nous verrons.*

The epidemics succeeding 1817 seemed to call out the following remedial agents. The writer found mention made of none of them prior to the date accompanying them. The mere enumeration of them here in this abstract will suffice to show how lamentably fatal cholera has been, and how helpless medical skill is in rescuing human life from this scourge. Many remedies that we now see heralded in print as new and wonderful in curing cholera, are very old. Many remedial measures are mentioned in these lists which provoke a smile of pity or of incredulity.

The epidemic of 1826-27 called out the following named agents as useful in curing cholera: Carbolic acid, hydrocyanic acid, nitro-muriatic acid, alum, antimony, arnica, bismuth, buchu, cauterization, chlorine, counter-irritation, cupping, gold chloride, oxygen, purgatives and sodium chloride.

The epidemic of 1832-34 brought out the following named remedies. The lengthy list of agents is perhaps explained by the fact that the epidemic was a terrible one in its severity and mortality: Sulphuric acid, albumen, alkalies, ammonia, bandaging, baths of hot air, baths of nitric acid, baths of sand, baths of vapor, belladonna, bile, bladder injections, blood transfusion, cinchona, coffee, columbo, copper sulphate, creosote, diuretics, electricity, evacuants, enemata of matico, saline enemata, enemata of tobacco infusion, guaiacum, hæmospasia, horseradish, ice, inhalations, injections of venous salines, ipecac, iron, juniper berry oil, lead, ligatures, lime water, venous milk injections--musk, nitrous oxide, oil cajuput, croton oil, percussion--tapping on the abdomen,

salines, stimulants, strychnia, sudorifics, tourniquet, turpentine, and cold water.

In 1848 the following remedies were brought forward: Hydrochloric acid, anæsthetics, arsenic, camphor, capsicum, carbon, carbon bisulphuret, carbon chloride, chloroform, ergot, ether, gunpowder, hydrotherapie, matico, metals, naphtha, naphthaline, silver nitrate, silver oxide, sulphur, cold, zinc oxide, and zinc valerinate.

The epidemic of 1854 brought out the following named remedies: Alcohol, calcium chloride bath, hard cider—cinnamon oil, eupatorium, garlic, movement, castor oil, croton oil, potassium permanganate, quassia, sugar, vaccination, and water by injection into the peritoneal cavity.

The following named remedies were suggested during and following the epidemic of 1865-66: Carbolic acid, nitric acid, nitrona acid, insufflation of air, amyl nitrite, calabar bean, chloral, chlorodyne, coca, dosimetric treatment, hypodermic injections, magnesia sulphate, liquor potassa, spinal ice-bags, water hypodermically, lavements of wine, woorara.

The only untried remedies suggested in 1873 were sulphuric acid and chloralum.

A number participated in the discussion. The principal points are as follows:

Dr. J. N. Danforth gave the pathology of cholera from studies and researches of the disease. Every organ of the body, said he, is more or less affected. But there are three lesions that are apparently uniformly present, namely, those of the blood, intestinal canal, and in the kidneys. These, I say, appear to be uniform. The blood in the early stage becomes thickened, and may not flow at all; it is sometimes stationary, and is filled or invaded with microbes, or with other living organisms. They are not related to the causation of cholera, and the same variety are not always found in the blood, in the intestinal canal, or in the discharges.

Cholera is not produced by any specific germ. The blood loses its watery portion with great rapidity and to great extent. In 1873, during the localized epidemic of cholera here, he investigated specimens of the discharges of the intestinal canal from both ante-mortem and post-mortem cases, and in each he found vast numbers of micrococci and other low forms of organisms, but he is sure they had nothing to do with the causation of cholera, but that there was formed a *nidus* for their development. Ziegler, Lieber, and La Barra or La Blat, according to Ziemssen, assert the same thing to be true—that they are incidentally there and spring up in

the intestinal fluid, or in other words it is a field for them to thrive. The speaker demonstrated his remarks by illustrations on slides from portions of the intestinal canal and fluids that he had mounted. The first drawing represented a portion of the intestine, about the middle of the attack of the disease, and showed a groping of cells and granular matter. Some authors state that the intestinal epithelium is not discharged until after death, but I am positive they are thrown off before death as well, that the canal is stripped of its epithelial coating while the patient is living, or that the villus is stripped off, or, if you choose to state it, the villi are stripped from their coating of cells. A specimen of the ileum was shown representing a portion of it from about ten inches above the valve, and the cellular coating of one of these villi. Specimens of Peyer's glands were shown, and their swollen or distended condition illustrated with a group of cells and many nuclei. The whole surface of the lining of the intestine becomes very red, or of a bright pink color, and ecchymotic patches form. The arteries are less distended, but there may be found an enormous amount of stagnant blood in the intestinal canal.

The Lesion of the Kidneys.—At an early stage of the disease these organs undergo a rapid fatty change, they become enlarged; so, too, does their cortical portion. This acute fatty change rarely ever becomes chronic, should the patient recover (and he was sure it did not become so if they died). The liver, the spleen, the brain and spinal cord may sometimes become hyperæmic; doubtless they become so quite often. Now these changes do not throw a great deal of light upon the cause of cholera, if any at all. Indeed, we have not arrived at the cause. Those writers who state that there is a specific cholera germ, but do not state what it is, are not positive that a germ really does exist. Koch believes he has discovered the germ, but his experiments to prove it thus far have been futile. Lesions occur in the small intestine—the rectum included—due to an invasion of germs or a virus of which we do not know as yet what it is; and its effects further determine to the emunctory organs, and cause depuration. First there are the intestinal discharges, and on that ground the blood loses its watery and saline elements, and the kidneys fail in their function.

Dr. W. T. Bellfield, regarding a special organism, would first state his knowledge upon this subject, which was, in one sense, second-hand. He would endeavor to recapitulate briefly Dr. Koch's discoveries whilst he was in Egypt and

India. There is constantly present in the wall of the intestine an organism that is easily recognized by reagents and stains that is never present in the blood or any of the organs of patients who die from other diseases or causes. However, this does not prove that this organism is the cause of cholera, or that the cause of relation exists, as it does, in some other infectious diseases, notably one or two that will be mentioned later. The association of them may be explained in one or two or three different ways. Of course it may perhaps be a cause. To decide this (a matter quite impracticable or unlikely), would be to inoculate a human being—to produce the disease by separating the organism from the juices and transmitting it to a healthy human being, the same as a healthy animal can be inoculated with anthrax. Koch states that there is a specific germ that is constantly associated with cholera, and that no other germ is present; but when he applied the crucial test of separating that organism and endeavored to inoculate dogs, cats, and white rabbits, his experiments failed. But, on the other hand, this does not prove or disprove that there is a specific germ to cause cholera, for none of these animals will take cholera. They have an immunity from the disease, although there may be certain domestic animals that will contract the disease. The bacillus alluded to by Koch, as he asserted, is always present and distinguishable from other organisms, and they rapidly multiply. In relapsing fever there are found other low forms of organisms. The spirillum is always present in the acme of that disease. I think the germs that exist in cholera discharges are in the relation of association only. Regarding their natural history, they flourish most in a slightly alkaline fluid, and acids destroy them, and they are or should be a principal adjunct in the treatment of cholera.

Dr. John Bartlett, upon invitation, gave the results of some interesting experiments made in 1874 on a fungus, and his deductions therefrom, which are as follows: The fungus undergoes phases of development. First it is a cell, and is the active agent to alter and impair the blood and tissues. This, we suppose, is ultimate. In ague it is a cell in a developing fluid, but does not rest as a cell. It aggregates and deteriorates tissues. These cells form a certain crystalline something. This crystalline substance is not lifeless; it puts forth buds, these set forth a fluid; it is homogeneous. It apparently is nothing, yet it is a protoplasmic fluid, and there exists a cell form of material crystalline substance, a

bud—a fluid which is protoplasmic, and cells form again identical to those that were first formed. The cells, too, may be inert, and may not self multiply. The protoplasmic fluid is not recognized in the blood. Invisible atoms become visible atoms. Dr. Koch's experiments thus far have given unsatisfactory results. He may demonstrate the micrococci or bacillus so that it can be seen with the naked eye. Protoplasmic fluid is not recognizable by the aid of the microscope until cells are developed.

Dr. C. G. Smith stated that there seemed to be many points to settle at this time relative to the contagiousness of cholera. All the old theories in this respect seem to be changed. Years ago he made up his mind that it is highly contagious. He had been surprised to see a woman with the experience of Florence Nightingale pronouncing against this theory. Some physicians state it is scarcely necessary to take any special precautions to prevent contracting the disease. Some French physicians, so it is reported, were so enthusiastic upon this that they have tasted and drank the discharges of patients dying of cholera and did not take the disease. In 1854 he believed it had been demonstrated that the discharges were contagious—not when they are fresh, but when they ferment and have become decomposed. The whole history of the disease proves its communicability. In India moisture and filth propagate the disease, and it becomes started on the grand march along the great lines of travel around the world. This it does not quite do, for he never heard or knew of an outbreak of it in Australia. This looks to him as though the scourge could be “stamped out” by vigorous executive quarantine measures, and we should quarantine ships before they reach this continent where there are lurking suspicions of cholera aboard. For if the disease should be transported here, and the patients allowed to travel along our railroads to cities not along the seaboard, it is a much more difficult matter to “wipe it out.” In the last epidemic in this city, there seemed to be a focus of cholera at Butterfield and Thirtieth streets, and twenty cases of cholera “sprung up” at once. The inhabitants were quickly removed. The interior of the houses were fumigated, and the other premises were cleansed and purified, and the disease was immediately “stamped out.” It is a malignant poison, and finds its way into the intestine, and nature makes a heroic effort to rid the system of it by profuse perspiration, pouring out of serum, etc., all of which is analogous to an eruption. The result of these morbid symptoms is purging

and vomiting, thickening of the blood, want of urinary secretion by failure of the kidneys to act, appearance of cramps, etc., etc., until a final stage of collapse and death is reached.

A letter, addressed to the Executive Officer of the Society, was read from Dr. John H. Rauch, Secretary of the Illinois State Board of Health, as follows:

SPRINGFIELD, ILL., July 29th, 1884.

Dear Doctor,—I am in receipt of your letter of the 24th inst., asking if I have any sanitary suggestions to make for the benefit of the Society and the protection of the health of the city, in view of the possible danger of an epidemic?

As a matter of public policy, I think it better that such suggestion, with reference to Chicago, should originate with Dr. DeWolf, and, in my judgment, he is doing all that he can with the resources at his command. The Chicago Medical Society, however, may strengthen his hands morally, and possibly help to increase his material discussions as are proposed. The condition of the river, and especially of the south bank, is a matter of the utmost importance to Chicago, in the event of a cholera epidemic, and, indeed, at all times. Sixty thousand cubic feet per minute, transferred from the river to the canal, will keep the former clean and harmless; will prevent the possibility of pollution of the water-supply at the crib; will affect sixty-six per cent. of the south fork, and will so dilute the sewerage as to make the canal unobjectionable to the communities along its banks. To secure this transfer requires two things:

1. That the pumps at Bridgeport be operated to their full capacity.

2. That the waters of the Desplaines river be prevented access to the south fork through the Ogden ditch.

If the Society can achieve this, it will render a most important service to Chicago; will help DeWolf in his arduous work, and earn the gratitude of 150 miles of cities and towns and hamlets along the canal and Illinois river.

Very truly, yours,

JOHN H. RAUCH.

Dr. C. W. Earle stated that men of his age had not passed through epidemic cholera. As a physician, he could, therefore, say nothing regarding it from experience, and preferred to hear what our older brethren had to state in this respect. Regarding the differential diagnosis of infantile diseases, he could, were it germane to the subject under discussion, add

something; or were Asiatic cholera present, infantile diseases and it could be discussed simultaneously. He thought diseases of children, especially the Summer bowel difficulties that they have, should concern us more at this time than cholera, and he would at an early date, if desired, say something about how a remedy may be devised to diminish the great mortality among this class of our population.

Dr. N. S. Davis was invited by the President to give the history of the last few epidemics, the differential diagnosis, and his treatment of cholera and cholera morbus. He stated that he felt embarrassed in discussing these subjects before the Society, as the time for doing so was limited, and he was afraid that he would consume more time than belonged to him, and to do so hastily would prove unsatisfactory to himself as well as to others. He had studied cholera in epidemic form clinically in a large degree since 1849. In the city of New York, where he lived at that time, it prevailed pretty extensively. He remained there until the epidemic subsided, and administered to those afflicted with the disease for twenty-one days and nights consecutively. He has seen more or less of epidemic cholera when it has appeared here since that time; and during the Fall of that year he removed to Chicago, and we had it here also during the Summer of 1850-51 and '52. In the Summer of 1853, Chicago was clear of cholera, and there was no semblance of the disease, but in 1854 it broke out again. The first case appeared in the western portion of the city on or about the 20th or the 24th day of April. Cases "sprang up" disjointedly in different parts of the city every three, four, five or six days during the months of May and June, and eight or ten deaths a day occurred during the last days of June (although the newspapers stated to the contrary). He then gave a number of interesting reminiscences showing how the authorities quarantined down on the Illinois river to prevent the disease entering Chicago from the interior of the State. In 1866, when it again appeared, he pushed his last resources to prevent its becoming epidemic, and quite exhausted his powers of vision to discover the power of its contagion. He kept the alvine discharges of patients having the disease for one or two weeks to discover this, and had in his possession now drawings that he made at that time. So far as the disease is concerned, there are a half dozen different varieties of germs. They are accompaniments of the disease. And every variety of disease having a degenerative accumulation of natural cells in the tissues, is invested or accompanied by some

form of germs, wherever there is a deteriorative change of living organic matter, or where dissolution is reached, no matter what the disease is, germs are present not as causes but as accompaniments; they are uniform and are accompaniments of the effects of the disease. Some writers or experimenters may produce the disease by inoculation, but he had not known of this being done. He recalled two instances of steamships crossing the ocean in the year 1848. They came within about the same length of time as now, perhaps, though a day or two longer was required then, but cholera does not come with the tide of travel, although it spread over Europe during that year. One of the vessels was destined for New Orleans. The other was bound for New York. The latter was quarantined, as two or three emigrants on board were attacked with the disease. They were taken on shore to a boarding- or lodging-house, on Washington street, that contained 400 others. Yet cholera did not spread. It died out at quarantine. This occurred in either November or December of that year. The vessel bound for New Orleans arrived there, and cases of the disease appeared on board the ship ere she got within 500 miles of New Orleans. The vessel was not quarantined, and the result was cholera developed furiously in that city. In the Spring of 1849 it "started up" again in New York and spread over the country, although vigorous measures were pursued to "stamp it out." This cannot be done, however, and we must look to see it "die out." It will not prevail for more than one or two seasons in succession as a rule, although in this city, the years 1849, '50, '51 and '52, proved an exception. Regarding the theory of germs and propagation of the disease during the year 1854, no one disinfected the discharges. There were no cess-pools but what some of the dejecta were emptied in, and these, too, were not disinfected. Yet cholera did not appear in Chicago again until 1866. Of course though, we should exercise vigilant sanitary precautions to prevent an outbreak of it by hygienic and sanitary rules, for the disease cannot flourish in an elevated position, where there is an abundance of fresh air and pure water. (The Catskill Mountains were mentioned as a place of illustration where the disease cannot obtain a foothold.) Yet the disease was prevalent in Europe in 1865, and we anticipated its coming to this country and visiting this city the year following, and many of the timid ones made their arrangements for getting out of the city early, and he advised any physician who was afraid of getting

the disease, or if he believed it to be contagious, to remove when it makes its appearance. It began during the latter part of June, but not very vigorously. A few deaths occurred every day during this month and throughout July. In August it rained nearly every day; and excessive moisture does not help to increase its virulency or prevalence. The result was cholera entirely disappeared. The agriculturists held their Annual State Fair in the city during the first week in September. Farmers arrived here and stopped at hotels where but a few weeks previously people died of cholera. The farmers all returned home safely in good health and did not take the disease. During the last two weeks of September the weather became very sultry and hot, the moisture and water of the August rains were dried, when cholera rapidly "sprang up" again, and 1,000 deaths occurred in the following three weeks, which extended over into October. There was an unusual sharp prevalence of it. Then frost appeared, and a little later snow fell, and in another week no trace of the disease was left. Three things are essential to produce cholera where they co-operate together: 1st. High temperature. 2d. A location where the soil is in a damp condition, favorable for decomposition of organic matter. 3d. Where an organism is in that soil.

Prevention.—Briefly, then, antiseptic measures. Entire cleanliness, and in this we need not look much beyond our own location to prevent it. Alluvial soil must be looked to, fumigation and hygienic rules must be regarded. Relative to the differentiation of epidemic cholera and cholera morbus, we will hastily give the more prominent symptoms of each. In the latter disease the urine is seldom or never suppressed. There are more griping pains in cholera morbus; then, too, there is no preceding stage of diarrhœa, while in epidemic cholera there is almost always a premonitory stage of diarrhœa, lasting from four or five hours to as many days. It is a painless diarrhœa. There is lassitude, and there is sometimes a "crawly feeling" that "steals" over the patient, or a sense of numbness comes on, and there supervenes a strange prickly feeling. There are also noises in the head, or a stunning feeling about the head and ears until the patient will have an attack of purging and pour out a vast quantity in the chamber. The blood recedes from the surface. The patient attempts to lie down, but he is suddenly disturbed from this position by an attack of vomiting. He vomits and purges an unusual quantity of serum, and this process he repeats every ten or twenty minutes. The chamber may be

half-filled at one attack of purging, or from one discharge. It is rice colored, or turbid in color; little flocculi appear in it, also mucus and epithelium, which settles to the bottom. The patient rapidly withers; his lips become leadened. In three or four more evacuations, he is seized with cramps. They appear first in the calves, then in the muscles of the arms; the voice becomes husky and hoarse; he can scarcely speak above a whisper; there is no bile in the discharges; there is lowering of the temperature; the breath is cool. Sometimes cholera morbus will put on this aspect, and again a few cases of true cholera will differ from the above hurried description. A patient may be so violently attacked that in a few minutes he becomes faint and goes at once into collapse, or in from three to six hours collapse will come on, with perhaps only one evacuation of the bowels. The speaker then cited a typical case of this form of cholera occurring in a Norwegian laboring man. It is as if the vital forces are paralyzed at once.

Indications for Treatment.—If it were true that these little microbes caused the disease and acids would kill them, then the first thing to do is to get acid into your patient and kill the germs. Give them some form of the mineral acids, as the dilute sulphuric, sulphurous, or the hydrobromic acid, but we must not depend wholly on these to arrest the progress of the disease. We must immediately put the patient at rest. The mucous membrane in its entirety is an absorbing surface. In its first and middle portions its action is changed or is converted into a most rapid exudation. The surface of the stomach becomes exosmic in its action. There is relaxation of the cutaneous surface that needs to be attended to; the blood undergoes a rapid change as a result of the disease. The saline elements and watery portion of it are washed away; the blood becomes thickened; so much so oftentimes, that it will not circulate. Molecular change and heat is disturbed. The vaso-motor nerves may be the first to take on this primary change in the disease. We must adopt measures to stop the inverted action of the mucous membrane. How are we to do this best? The speaker had tried every rational method of treatment that he could devise in former years, although he never had tried horseradish, epsom salts, vaccination or gunpowder, as had been mentioned in the paper. He has cupped the spine, applied sinapisms over the epigastrium and spine; applied dry warmth and frictions; had seen patients placed in the ice pack and rolled in blankets wrung out of ice-cold water. He

had applied salt and ice about the spine, and he had used emetics of salt and mustard; had bled them by opening a vein, when the blood would run, and this he has seen afford temporary relief. In a few instances emetics of salt and mustard he has seen had helped a patient. *The most successful method, however, is to diminish the excitability of the mucous membrane, lessen the tendency to wasting of the saline elements and promote the action of the kidneys,* and first of all, the cholera patient should be placed entirely at rest in a horizontal position, then dry warmth applied to his limbs. Do not apply friction, and if cramps appear, gently seize the muscles with the hands and compress them. Apply a large sinapism of mustard to the epigastrium, and when it becomes too hot, change it to a point opposite on his back, or between the shoulders. During the years 1866 and 1873 he gave internally the following powder—calomel, gr. i; morph. sulph., gr. $\frac{1}{6}$; sacchar. alba, gr. v—after each attack of vomiting. Do not wait to give it at stated intervals, for, to do so, it might be given the very moment he vomits again. Mix the powder with a spoonful of ice-water; then give a small piece of ice to satisfy the patient. Serve the rectum in the same way with an anodyne and alterative remedy by giving a powder composed of plumbi acetat, gr. x; morph. sulph., gr. ss, in two ounces of cold water. This is to be used as an enema, and should be retained by assisting the patient to do so. The latter part of this treatment he has pursued since 1849. In addition to the internal remedies, he gives carbolic acid, gr. $\frac{1}{4}$ — $\frac{1}{2}$; tr. opii. camph., 3ss— $\frac{1}{2}$; tr. gelseminim, gtt. v, in a little glycerine and water alternately with the powder. These are very beneficial remedies to overcome the vomiting and assist the urinary secretion. Give other remedies also to favor secretion of urine, such as the diluent drinks. We should build patients up and prevent collapse. Should this ensue, we must replenish their forces by giving any of the broths, such as beef tea or chicken soup, or rice boiled with meat, well seasoned with common salt to make up for the waste of the saline portion of the blood that has been washed away. Give also strong coffee in teaspoonful amounts at first every few minutes, and gradually increase this quantity to act on the vaso-motor system. Repeat it as often as every fifteen minutes, increasing the quantity steadily as it could be retained. The skin should also receive especial attention in addition to the above remedies that are to be applied externally. Give a hypodermic injection of atropine to act on the periphery, combined, perhaps,

with minute doses of strychnia, which may be introduced anywhere over the surface. Do not use ergotine, for this is depressing. One writer recently claims that to introduce an equal mixture of whiskey and water in the areolar tissues of the thigh until reaction comes on will arrest further progress of the disease. I would suggest instead of this that it consist of a saline water injection, to be used in the same manner. Such then is the outline in substance of the treatment to replenish most cases, and if persistently and carefully carried out will, in twenty-four hours, bring about a fair chance in many instances for the patient to be on a good footing.

The Society thanked the Doctor for his address, and it was resolved to continue the discussion of the treatment of cholera at the meeting two weeks hence.

LISTON H. MONTGOMERY, M. D., *Secretary*.

MEDICAL SOCIETY OF VIRGINIA.*

The Fifteenth Annual Session convened at Rawley Springs, Rockingham County, Va., at 8.30 P. M., Tuesday, *September 9th*. The President, Dr. J. E. Chancellor, of the University of Virginia, and the Recording Secretary, Dr. R. G. Cabell, Jr., of Richmond, were at their desks. The Fellows of the Society and Visiting Delegates were entertained as guests of the Springs Company during the session. During the four days of the session, there were about 130 in attendance.

TUESDAY NIGHT.—First Meeting.—The President, after calling the Society to order, requested Rev. Dr. Robert C. Matlack, of Philadelphia (who was visiting the Springs at the time), to open the session with prayer.

After prayer, Dr. M. G. Ellzey, of Washington, D. C. (who is the Summer Resident Physician at these Springs), delivered an *Address of Welcome* on behalf of the Springs Company, which address was a fine one as to style, and useful because of its pointing out the principal places of interest related to the Springs. The welcome was cordial, and throughout the sojourn of the Society, every courtesy on the part of the officers, clerks and servants was extended to the members of the Society that the most liberal handed hospitality could suggest. Every opportunity for thorough investigation was also offered the doctors.

*In great part, compiled from reports given in the *Medical News* and *Medical Record*.

The Address to the Public and Profession was delivered by Dr. Robert J. Hicks, of Casanova, Fauquier County, Va., who selected as his subject—

Hygiene in Relation to the Private Family.—He began by showing the important relations existing between individual sanitation and the public health. He briefly described the investigations of Pasteur, Koch, and Devaine, in connection with the germ theory, explaining the microbes, bacilli vibrios, and spores found by these observers in different forms of disease, and warned his hearers not to be too ready of belief as to these micro-organisms producing disease, as they may be simply accompanying the disorders in question. After this question is fairly settled, there yet remains the most important thing to be done, *i. e.*, how to best destroy them. He enumerated the different hiding-places of these germs, and showed that by destroying the conditions that make and support them we can in that way do best in practical hygiene. He said that while these agents do exist, and their existence is as yet unavoidable, it is a further fact that we are responsible for them to a much greater extent than we are willing to admit. Many are chargeable to ignorance and recklessness. He showed how some of the preventable diseases are produced simply from people not having a knowledge of the primitive points of practical hygiene. Public legislation, while in every way desirable, can do little less than establish general quarantine laws against the great plagues, but, except in a general way, it cannot enter into the private house, it cannot reform the domestic habits, it cannot enforce purity in a private well, and as these things involve the life and health of the family, they must be attended to from within. As nations are but aggregations of individuals, as is the individual so is the nation. Toulon and Marseilles are now paying the terrible penalty of individual uncleanness.

The happiness, longevity, and often the success itself of man, is largely dependent upon an intelligent recognition of the laws of health. Misery, disease, and failure in life are the penalties paid for their violation. Penalties extending beyond one generation are frequently the result of personal neglect. Our personal knowledge of pathology shows us that diseases are often perverted life processes, and are therefore more easily prevented than stamped out when once begun.

Dr. Hicks showed a firm belief in the preventability of consumption, and did not think it hereditary to anything like the commonly accepted extent. Out of one hundred

cases in New York only twenty-six per cent. were hereditary, the remainder (seventy-four per cent.) are charged to damp air, insufficient food, poverty, and filth. He wished to impress upon his hearers the fact that tubercle is not a new formation dependent upon hereditary taint, but is merely an alteration of normal nutrition, a degraded tissue resulting from neglect of trivial complaints in connection with a disregard of ordinary sanitation. He illustrated these and other points by cases drawn from his private practice. He classed Bright's disease, dyspepsia, gout, etc., as preventable diseases, due frequently to personal habits. No organ can continue sound and be the constant carrier of morbid products. The remedy for this class of complaints consists in change of habits, moderation, etc. The subject of the location of the family house and its bearing upon the health of its inmates was taken up and carefully discussed, the point being also illustrated by cases under his own observation. He pronounced pure air antiseptic, showing, by well-chosen illustrations, its influence on animal life. He thought that from 1,200 to 2,000 cubic feet of air must pass through a room every two or three hours to make it healthy for one individual. The addition of one other person impairs its purity and renders it unfit for use. It becomes not only unhealthy but unclean. He took up the subject of ventilation, and gave some practical hints regarding it. He called the attention of his hearers to the fact that dry heat was the only perfect disinfectant, extreme cold having failed in that direction in many instances. The importance of light, both to the well and sick, was touched upon, and practical examples were given from his own observation. He then showed, from cases in his own practice, how typhoid fever, diphtheria, and some other diseases were often caused by the presence of old rubbish, bad water, and filth. He believed that certainly in decaying animal matter, and probably also in decaying vegetable matter, are found the germs that produce zymotic diseases. The thorough destruction of these matters insures the destruction of the germs. As one person, by bad personal habits, may not only produce disease in himself, but pass it on to others, the innocent suffering with the guilty, each individual should feel the great responsibility resting upon himself. He concluded by showing the economical side of the sanitary question, proving how much could be saved by personal attention to the first principles of hygiene, and demanded a higher grade of education for the children of to-day in matters pertaining to individual and home sanitation.

After some routine work, the Society adjourned until to-morrow morning at 10 o'clock.

SECOND DAY.—*September 10th—Morning.*—The serious illness of Honorary Fellow, Dr. Robert S. Payne, of Lynchburg, who was the first President of the Society, having been announced, the Secretary was directed by the unanimous vote of the Society to telegraph to him the resolutions of sympathy adopted.

Upon call for reports on advances in the different departments of medical science, the **Report on Anatomy and Physiology** was read by Dr. L. B. Edwards for Dr. Hugh T. Nelson, of Charlottesville, Va., who was unavoidably detained at home. In the *blood*, he stated that a third blood-corpuscle or hæmatoblast had been discovered by Bizzozero, of Turin, which observation had recently been confirmed by Leker and Fred. Rauschenbach. It is a disk with either parallel or bi-concave surfaces, one-third smaller than the red corpuscles, and ranking in number between the red and white disks. Their function is seen in their coagulation, which was formerly attributed to the white corpuscles. They play an important part in thrombosis and embolism, in septic fevers, and in operative surgery. They are especially abundant in cachectic and in anæmic blood.

In regard to *digestion*, Poehl found that all the tissues of the body possess some peptic power, and suggests that the ferment in the lung tissues dissolves and digests the fibrinous exudation of croupous pneumonia. Poehl maintains that gastric or tryptic digestion is simply a soaking of the albumen with water to its utmost capacity, and that the different forms of albumen are digested in proportion to the rapidity with which this absorption of water takes place. Peptone, then, is a modification and not a decomposition of albumen. Hence peptonized foods are fast superseding the use of meat extracts in practice.

Dr. Nelson thought the day near at hand when practical benefits would result from the study of *cerebral localization and cerebral nerve-tracts* which is now being carried on by competent workers. Valuable statistics, showing the use of the trephine in traumatic epilepsy, were given. Charcot and Pitres's investigations as to the locations of the motor and non-motor zones were mentioned. The conclusion is arrived at that the *visual area* lies in the occipital lobes. *Auditory impressions* are received by the first temporal convolutions on the right side for the left auditory nerve, and *vice versa*.

The power of *recognizing words* is located in the first left temporal convolution in right-handed persons, and *vice versa* for left-handed persons. *Odors* impress the temporo-sphenoidal region of the base of the brain. The *taste* centre is not yet located. The sense of *general sensation* is located in the cortical cells of the central convolutions, and in those parts of the parietal convolutions adjacent to the posterior central convolution. The centres presiding over *articulate language* are in the convolutions about the fissure of Sylvius—the left side in right-handed persons, and *vice versa*. The *ideo-motor power* resides in the third frontal and adjacent part of the anterior central convolutions. Next, it was shown that there exist direct nervous tracts between the cortex cerebri and both motor and sensory nerves, and a system of nerve-tracts in connection with the optic thalamus. A system of nerve-fibres pass from the cortex cerebri to the gray centres of the pons. Several distinct nerve-tracts are also found in the tegmentum of the crus cerebri, lying beneath the corpora quadrigemina.

This paper was referred to the Committee on Publications.

Dr. Wm. C. Dabney, of Charlottesville, Chairman of the Committee on Medical Legislation, reported that, aided by Mr. John B. Moon, of the House of Delegates of Virginia, and Senator Trout of Roanoke, a bill was enacted which, while not entirely satisfactory, provides for a *State Board of Medical Examiners*, before which every applicant for practice after January 1, 1885, must pass a satisfactory examination before receiving a license to practise medicine or surgery. Two examiners at large are to be elected by the Society, as also three from each of the ten electoral districts of the State. A fine of \$500 is to be imposed upon those who do not comply with the terms of the law.

A few minutes after 11 o'clock, the special order was announced.

The Annual Address of the President.—The speaker, after first calling the First Vice-President, Dr. P. K. Graybill, of Amsterdam, Va., to the chair, began by congratulating the Society upon the great and growing interest so evidently manifested in the yearly meetings, as evidenced by the large attendance last year, and the still larger attendance of members this year. The character of the papers presented had also improved of late years. He mentioned especially the great work done by the Society members, in securing, since the last session, a partial recognition of the rights of the profession, by legislative enactment, in the passage of the

Anatomy Bill and the Act establishing a State Board of Medical Examiners, but also said that, gratifying as this fact may be, there yet remains much to be done by the proper authorities. With his words of greeting he said was mingled the always sad duty of presenting to the Society the tidings of the work of death among the membership during the past year. It had seemed to have been a year of unusual mortality, among the elder members especially. Six or eight of the charter members have died since the last meeting, and several of the younger Fellows. Three of those taken from the Society's work were ex-Presidents, and one a distinguished professor in the Medical College of Virginia. The speaker paid a brief tribute to the memories of the departed members, and referred in touching terms to the memory of our beloved Honorary Fellow, Dr. J. Marion Sims, calling him the Moses of our profession, as well as the father of gynæcology in America.

He then passed to the consideration of his subject proper, saying that the central and all-absorbing thought of the world of medicine was *progress—scientific progress*, the development of a more advanced medical education, and a higher standard for graduation. The advance in medical science has been so rapid, and the glamour thrown around the medical study of to-day was so great, that there was danger that the work in its development done by the earlier fathers of medicine would be overlooked. He would like to call a halt in this, and ask the members present to review with him briefly the origin and history of ancient medicine. He then proceeded from his standpoint to show that with the creation of our first ancestors the necessity for the healing art originated, and he proceeded to unfold, step by step with the progress of ages, its growth into a science. He first took up the medicine of the patriarchs, following it up through centuries to the sacerdotal system or that of the priesthood, and in what manner these had led to the present distinctly professional system. He plainly showed that medicine had an organized existence nine hundred years before Hippocrates—the generally accepted “Father of Medicine”—and perhaps even beyond this. He quoted Herodotus to show the expedients commonly resorted to in the earlier days of science, the recording of cases treated, and remedies used, by writing on the walls of ancient temples, etc. The President then went on to describe the systems of medicine. He began with the Ayar Veda, or sacred revelations of the Hindoo system, and then spoke of the Greek system, fully

elaborating the subject. The Roman and Israelitish systems of medicine were fully brought into review, and the entire portion of the paper relating to these systems showed great research and much familiarity with the matters referred to. He also gave an interesting account of the Ebus papyrus, found at ancient Memphis about ten years ago. He referred to this "hermetic-book of medicament" now to be seen at Leipsic, and said that it showed diagnoses made, remedies suggested, and systematic treatment of diseases about 1600 B. C. He then traced the origin and progress of medicine in Egypt, and how in after years it was first introduced into Rome, bringing it down to the time of Hippocrates.. He spoke of the origin of the medical school at Alexandria and those of Cridnos, which gave rise to the Cridnerian lectures, etc. After this he took up the history of those men who were most prominent under the different systems of the practice of medicine in the olden time.

He referred to the importance of properly organizing and of selecting the proper men who should be placed upon the Board of Medical Examiners for the State, to be appointed during the session, urging the Society members to make it a thoroughly independent body. He, although praising the work of the committee, did not by any means look upon the Act constituting a Board of Examiners as it now stands, to be exactly what the profession desired, and suggested the appointment of a committee to recommend amendments to the bill as seemed necessary. He took up the subject of the State Board of Health, and showed how ridiculous such a Board was made by the fact that no money is given it by the State to do any work with, it consequently being without efficiency, and in fact a nullity. Lastly, he urged that steps should be taken to secure, as soon as possible, a full history of the deceased medical men of the State of Virginia, as it certainly was the duty of the present generation to rescue from oblivion the galaxy of illustrious names which have been emblazoned upon the honorable page of medicine in Virginia.

At the conclusion of the Address, thanks were voted Dr. Chancellor, and a committee was appointed to consider the recommendations contained in the Address.

Dr. Joseph A. White, of Richmond, presented a volunteer paper on

Naso-pharyngeal Obstruction and Hypertrophies in their Relation to Hearing.—Dust, such as arises from the macadamized streets of our cities, is one of the most active and pro-

lific causes of naso-pharyngeal irritation. Changes of climate and moisture in Winter are also special irritants that bring about catarrh and hypertrophies of the membrane lining the nose and naso-pharynx. His experience bears out the assertion that deafness is a frequent result of vegetation in the upper pharynx. After some minor suggestions, he said that all cases of middle-ear disease, whether acute or chronic, are accompanied, more or less, by naso-pharyngeal changes. And every case of nasal obstruction resulting in mouth-breathing, and all cases of obstruction of the lower nasal meatus, even where the air current can still pass through the upper passages, will, sooner or later, become more or less deaf, if the obstruction is allowed to remain. He remarked that posterior rhinoscopy is not of much service in little children, but *tactus eruditus* is of great value. Put one arm around the child's neck, with the fingers on the cheek so as to prevent biting of the examining finger by pressing the soft tissues of the cheek between the teeth. Then pass a finger up behind the uvula and explore the post-nasal cavity. Vegetations feel like a bunch of worms; hypertrophies are smooth and hard. In adults, if there is difficulty in examining, he passes a No. 1 bougie, with a small-sized piano-wire inside, along the lower nasal meatus into the pharynx, and draws it out of the mouth, in the same way that Bellocq's canula is used. Then tie the two ends of the wire together over the upper lip, or draw a small tape through, and by means of this forward traction of the soft palate one gets a fair view of the nasopharynx.

Anterior hypertrophy of the turbinated tissues can be removed by the cold snare or by galvano-cautery. Glacial acetic acid applied to the surfaces, with intervals of several days, is often successful. Chromic acid is also used in the same way. Sometimes these hypertrophies subside spontaneously, especially if in connection with posterior hypertrophies.

Nasal polypi, if large, can be removed by the snare; but when small evulsion is the best method, and the points of origin touched with chromic acid or the galvano-cautery.

Deflection of the septum, if slight, should be left alone. If sufficient to cause stenosis, any accompanying hypertrophies should be removed or destroyed, and the deflected portion perforated and forced back into position by clamp forceps and plugs, or by flat laminaria tents.

Outgrowths from the septum can be cut off by the bistoury or snare. Counter applications are not serviceable.

Hypertrophy of the pharyngeal tonsil can be removed by the cold or hot snare or by the cutting forceps, or by burning with the galvano-cautery.

Posterior hypertrophy of the turbinated tissues is best removed by the wire snare or by the galvano-cautery.

Chromic acid is the best of the chemical cauteries. It destroys the tissue to which it is applied without "running." Warm water instantly relieves any pain it may cause, especially if associated with bicarbonate of sodium. Poisoning from its use is easily prevented by douching the parts with warm water as long as the water becomes tinged by the acid. Of course, warn the patient not to swallow.

Anything that produces an ulceration of the mucous membrane over the septum will produce perforations, because the cartilage receives its nutriment from its mucous covering, but the perforation is limited in extent. If workmen would wear wool pellets in their nostrils, they would not suffer so much. In fact, all persons, working in dusty or "fummy" places ought to wear wool or cotton loosely packed in their nostrils during the hours of their work. He opposed the view of Dr. Donaldson, of Baltimore, as to the value of chromic acid in case of hypertrophy of the tonsils, unless the hypertrophy was soft and yielding. In *dense* hypertrophy of the tonsils, extirpate.

AFTERNOON SESSION.—The order of business being the *election of officers*, much discussion occurred as to the manner of entering upon the task.

By large majorities, and, in some instances, by unanimous vote, the following officers for the ensuing year were elected:

President.—Dr. Samuel K. Jackson, of Norfolk, Va.

Vice-Presidents.—Dr. Jesse Ewell, Sr., of Hickory Grove, Prince William county; Dr. Benjamin Blackford, of Lynchburg; Dr. R. I. Hicks, of Casanova, Fauquier county.

Recording Secretary.—Dr. Landon B. Edwards, of Richmond.

Corresponding Secretary.—Dr. Hugh M. Taylor, of Richmond.

Treasurer.—Dr. R. T. Styll, of Richmond.

The same *Executive Committee*, and *Committees on Publications* and on *Nominations* as last year were continued.

NIGHT SESSION.—The Society convened at 8 P. M. It was engaged from this hour until nearly 2 A. M. in electing members of the *State Board of Medical Examiners*.

Examiners from the State-at-Large.—Drs. Wm. C. Dabney, of Charlottesville, and F. D. Cunningham, of Richmond.

First District.—Drs. S. W. Carmichael, of Fredericksburg; O. B. Finney, of Onancock; W. W. Douglas, of Middlesex county.

Second District.—Drs. Thomas B. Ward, of Norfolk; L. Lankford, of Bowers, Southampton county; Jesse H. Peek, of Hampton.

Third District.—Drs. R. A. Lewis, of Richmond; Charles R. Cullen, of Richmond; O. A. Crenshaw, of Richmond.

Fourth District.—Drs. William J. Harris, of Nottoway; Hugh Stockdell, of Petersburg; J. Herbert Claiborne, of Petersburg.

Fifth District.—Drs. W. L. Robinson, of Danville; T. B. Greer, of Rocky Mount; Rawley W. Martin, of Chatham.

Sixth District.—Drs. Harvey Black, of Blacksburg; H. Gray Latham, of Lynchburg; and Oscar Wiley, of Salem, Roanoke county, Va.

Seventh District.—Drs. William P. McGuire, of Winchester, Va.; J. H. Neff, of Harrisonburg; Hugh T. Nelson, of Charlottesville.

Eighth District.—Drs. C. C. Conway, of Rapid Ann Station; Bedford Brown, of Alexandria; and Alex. Harris, of Jeffersonton.

Ninth District.—Drs. S. W. Dickinson, of Marion, Smyth county; Robert J. Preston, of Abingdon; and R. D. Huffard, of Chatham Hill.

Tenth District.—Drs. Henry M. Pattison, of Monterey; Z. C. Walker, of Gish's Mill; and G. D. Merriwether, of Pedlar Mills.

[For the better information of the Profession of the State of Virginia, and of applicants who may hereafter apply for practice in the State of Virginia, we republish the law as enacted during the session of the Legislature last Winter, and also name the counties composing each of the ten Congressional Districts, for which Examiners have been nominated by the Society, as above named. The Secretary of the Society has transmitted the list in due form to the Governor for his approval.]

An Act to Regulate the Practice of Medicine and Surgery.—

1. Be it enacted by the General Assembly of Virginia, That there shall be for this State a Board of Medical Examiners, consisting of three members from each Congressional District in the State, and two from the State at large, whose term of office shall be four years, or until their successors are appointed and qualified. The

term of office of the Board first appointed, shall commence on the first day of January, eighteen hundred and eighty-five.

2. The said Board shall consist of men learned in medicine and surgery, and shall be appointed by the Governor on the first day of November, eighteen hundred and eighty-four, and every fourth year thereafter, from a list of names to be recommended by the Medical Society of Virginia. Vacancies occurring in such Board for unexpired terms, shall be filled in the same manner. Such recommendations shall be by the votes of a majority present at some meeting of the said Society, and the same shall be certified to the Governor by the President and Secretary of such meeting: provided, however, that in case the Governor shall consider any of the persons so recommended unsuitable, he may decline to appoint such person or persons, and communicate the fact to the presiding officers of said Society, and such Society shall, within ninety days thereafter, make other recommendations in the manner hereinbefore prescribed, which will stand on the same footing in all respects as those first made: and provided further that if such Society fail to make such recommendations prior to the time of appointment, or within ninety days aforesaid, then the Governor shall appoint such Board, either in whole or in part, without regard to such recommendations. If any of said Examiners shall cease to reside in the district for which he was appointed, it shall vacate his office.

3. The members of said Board of Medical Examiners, shall qualify and take the usual oath of office before the County or Corporation Court of the county or corporation in which they shall respectively reside. The officers of said Board shall be a President, Vice-President and Secretary (who shall also act as Treasurer); such officers to be members of and elected by said Board. The first meeting of the same shall be at Richmond, at such time as the Governor shall notify the members by mail to assemble. Subsequent regular meetings shall be at such times and places as the Board may prescribe, and special meetings may be held upon the call of the President and two members, but there shall not be less than one regular meeting per annum. Five members of said Board shall be a quorum; said Board may organize at its first meeting, and may, at its first or any subsequent meeting, prescribe rules, regulations and by-laws for its own proceedings and government, and for the examination of candidates for the practice of medicine and surgery by its individual members.

4. It shall be the duty of said Board, at any of its meetings, and of the individual members of said Board, at any time, to examine all persons making applications to them, who shall desire to commence the practice of medicine or surgery in this State. When the examination is by an individual member of the Board, he shall report the result of the same to the President thereof; and when an applicant shall have passed an examination satisfactory as to proficiency, before three individual members of said Board, or before the Board in session, the President thereof shall grant to such ap-

plicant certificate to that effect. A fee of five dollars shall be paid to said Board, through such officers or members as it may designate, by each applicant before such examination is had. In case any applicant shall fail to pass a satisfactory examination before the Board or before the three individual members to whom he shall first apply, he shall not be permitted to stand any further examination within the next three months thereafter, nor shall he have again to pay the fee prescribed as aforesaid: provided, however, no applicant shall be rejected upon his examination on account of his adherence to any particular school of medicine or system of practice, nor on account of his views as to the method of treatment and cure of diseases.

5. The fund realized from the fees aforesaid shall be applied by the Board toward its expenses, including a reasonable compensation to the President and Secretary.

6. Any person who shall obtain a certificate as aforesaid from the President of said Board shall cause his name to be registered in the clerk's office of the County or Corporation Court for the county or corporation in which he shall reside; and it shall be the duty of said clerk to register the name of every such person, describing such certificate, together with the date thereof, and the name of the President of the Board, signing the same in a book kept for the purpose, as a part of the records of his court, which shall also give the date of each registration, and his fee for each registration shall be one dollar, to be paid by the person whose name is registered.

7. No person who shall commence the practice of medicine or surgery after the first day of January, eighteen hundred and eighty-three, shall practice as physician or surgeon for compensation without having first obtained a certificate and caused his name to be registered as aforesaid. Any person violating the provisions of this section, shall pay a fine of not less than fifty nor more than five hundred dollars for each offence, and shall be debarred from receiving any compensation for service rendered as such physician or surgeon.

8. Any person who shall have been assessed with a license tax as a physician or surgeon by any commissioner of the revenue in this State at any time prior to the first day of January, eighteen hundred and eighty-five, shall be taken as having commenced the practice of medicine or surgery prior to that date; but any person who shall not have been so assessed, shall be taken as not having commenced such practice prior to that date.

9. Any physician or surgeon who shall commence to practice after the first day of January, eighteen hundred and eighty-five, and who shall reside in an adjoining State, within ten miles of the boundary line of this State, shall be entitled to stand the examinations and receive the certificate hereinbefore provided for, and such certificate shall be registered as hereinbefore provided, in that county in this State, which is nearest his place of residence, and such certificate and registration shall make it lawful for him to practice medicine or surgery.

10. Nothing in this act shall be taken as including or affecting in any way the practice of dentistry, nor shall it include physicians or surgeons residing in other States and called in consultation in a special case with a physician or surgeon residing in this State. Nor shall it be construed as affecting or changing in any way the laws in reference to the license tax to be paid by physicians, surgeons and dentists.

11. Provided, the provisions of this act shall not apply to any midwife.

Counties Composing the Congressional Districts of Virginia:

First District.—Accomac, Northampton, Lancaster, Richmond, Northumberland, Westmoreland, Gloucester, Middlesex, Matthews, Essex, King and Queen, Caroline, Spotsylvania.

Second District.—Princess Anne, Norfolk, Nansemond, Isle of Wight, Southampton, Elizabeth City, Warwick, York, James City, Charles City, Surry.

Third District.—Henrico, Goochland, Chesterfield, New Kent, Hanover, King William.

Fourth District.—Prince George, Sussex, Dinwiddie, Greenville, Brunswick, Mecklenburg, Lunenburg, Nottoway, Amelia, Powhatan, Prince Edward.

Fifth District.—Pittsylvania, Patrick, Franklin, Floyd, Henry, Carroll, Grayson.

Sixth District.—Botetourt, Roanoke, Montgomery, Bedford, Campbell, Charlotte, Halifax.

Seventh District.—Frederick, Albemarle, Clarke, Warren, Rapahannock, Madison, Greene, Rockingham, Shenandoah, Page.

Eighth District.—Loudoun, Fairfax, Alexandria city and county, Fauquier, Culpeper, Orange, Louisa, King George, Stafford, Prince William.

Ninth District.—Lee, Scott, Wise, Dickenson, Buchanan, Russell, Washington, Smyth, Bland, Tazewell, Wythe, Pulaski, Giles, Craig.

Tenth District.—Augusta, Highbland, Bath, Alleghany, Rockbridge, Amherst, Nelson, Appomattox, Buckingham, Fluvanna, Cumberland.

THIRD DAY.—*September 11th—Morning.*—The meeting was called to order at 9.30 A. M.

In response to an official telegram sent on the preceding afternoon to the first President and Honorary Fellow of the Society, Dr. Robert S. Payne, of Lynchburg, who has been recently stricken with, paralysis, expressing the sympathy of the Society, a telegraphic reply was read, showing a deep sense of appreciation of the consideration shown him by the Society.

Dr. Wm. W. Parker, of Richmond, by letter, presented the following resolution on *Free Medical Education*:

Resolved, That, in the opinion of this Society, the establishment of eleemosynary medical schools with the present limited course of study in the States would be ruinous to the profession and a calamity to the public; that in our State it would be the means of driving away the best pupils and the most talented young men, and in the end ruin our own excellent medical schools whose success and permanency should rest chiefly upon the talents of their teachers, and not upon the treasury of the Commonwealth. Adopted.

Dr. Samuel B. Morrison, of Brownsburg, presented a memorial of Dr. J. Marion Sims, an Honorary Fellow of the Society, which was adopted by a rising vote.

On motion, Dr. J. M. Toner, of Washington, D. C., was elected Non-Resident Honorary Fellow of the Society.

Dr. S. B. Morrison then read his report on **Advances in Obstetrics and Diseases of Women and Children**. He began by running over the case of pregnant women, and not only referred to the familiar truths of obstetrics, but from his own practice illustrated many of his points. He protested against too much interference with the physiological process of child-bearing, and thought that, as a rule, the less duty the accoucheur felt called upon to perform the better for the patient. He instanced the ease with which the Indians of this country went through this most natural work. He referred to the use and abuse of ergot and chloroform, and fully mentioned the proper method of employing massage and expression. Forceps, he thought, were invaluable, and he pronounced decidedly in favor of the use of the instrument. He believed fully in Denman's rule, that when the ear of the child can be plainly felt in the lower strait the forceps should be employed. Uterine hæmatocele in pregnant women was touched upon, and the reader presented a case from his own practice illustrative of this condition. He referred to the common occurrence of gynecological disorders, and in reporting some of his own cases illustrated the points made in his paper.

He particularly made reference to the fact that an early treatment should be employed in instances of the kind, and laid down the rules he was in the habit of adopting in like cases. Battey's operation he thought would not stand the test of time. He was very desirous that a school for nurses should be established in Virginia. On conclusion of the paper, several members made a few remarks concerning the views presented.

Dr. John Clopton, of Williamsburg, presented, through

another member, his paper upon *Advances in Psychology and Neurology*, which was simply an apology for not preparing a full report.

Modern Treatment of Wounds.—Dr. Geo. T. Harrison, of New York City, who was in attendance by invitation, presented a paper on this subject. He thought the credit was due to Lister of having been the first to devise a rational method of treatment with a full consciousness of the nature of the problem he had to solve. These problems are two: first to keep a wound aseptic; and, secondly, when wounds are already infected, to make them again *aseptic* by the application of antiseptic measures.

The first problem to be solved generally presents itself in this form. What is the method of performing an aseptic operation? This is accomplished: 1. By attention to the operating table. It should be free from blood and pus, well disinfected by a solution of corrosive sublimate (1 to 1,000), and covered with a perfectly clean blanket and sheet or other clean covering.

2. The field of operation must be carefully cleansed. The day before the operation the patient should have a general bath. That portion of the surface of the body which is the seat of operative measures is cleansed with soap and water. If there is much sebaceous matter, spirits of turpentine or ether should be used. Hair in the vicinity should be removed by the razor, and the surface then disinfected by a five per cent. solution of carbolic acid or corrosive sublimate (1 to 2,000).

3. The surgeon and his assistants should have hands and arms aseptic.

4. Instruments should be made strictly aseptic.

5. Hemorrhage must be arrested by tying all bleeding vessels with catgut.

6. The method of cleansing the wound is of importance. Silk or catgut should be used, rendered aseptic, of course. Drainage is essential. Rubber drainage tubing, or Neuber's decalcified bone drainage-tubes should be used. The rubber should be boiled before use and kept in a five per cent. solution of carbolic acid, and before introduction should be powdered with iodoform. The dressing necessary to maintain the aseptic condition was then described. The original Lister dressing was described, and Volkmann's modification explained, the object of which was to produce a *uniform* compression on the wound and its vicinity. The permanent dressing used by Neuber was described, the object being to

apply such a dressing as could be kept on the wound intact until the healing process was completed, and in that way all interference with the wound is avoided. The recent modifications of treatment introduced by Neuber, by which he proposes to give up drainage for all recent wounds, were described. He effects this merely by avoiding the formation of coagula within the wound. He, therefore, applies compression from without, buried catgut sutures, depression sutures, and skin implantation. Proof was then adduced to show that the healing process is accomplished more certainly and in a shorter time by the antiseptic than by any other method, and that the accidental wound diseases are best avoided by its use.

Dr. Samuel B. Morrison thought it best to let wounds alone, so far as probing was concerned. He had seen and heard of many cases that made him regard the use of probes as dangerous—especially in cases of gunshot wounds. Do not run the finger or a probe into a wound that possibly involves a vital tissue.

Dr. Hunter McGuire, of Richmond, had used the antiseptic dressing, time and again, to its minutest detail, and is satisfied that Lister's first recommendations added to the fatality of cases. Carbolic acid is itself an irritant when used as Lister originally recommended it, and causes inflammations that oftentimes have proved fatal—especially in abdominal surgery. He is glad that plan has been abandoned. Antiseptics are undoubtedly good in large over-crowded city hospitals—where even the walls reek with septic poison. But for country practitioners to go out with the idea that town antiseptics were essential would be to teach a mistake. He appealed to the country doctors present to answer whether or not they had bad results from the refusal to use *antiseptic* surgery. Their successes were marvellous—equaling, when skilful surgeons operated, the most satisfactory tables that "antiseptic surgeons" could present. Where the air is pure, uncontaminated by vegetable or animal decomposition or septic poison, ordinary cleanliness of hands, instruments and wounds, is altogether sufficient.

Dr. I. H. Stone, of Lincoln, Loudoun county, thanked Dr. McGuire for his practical remarks, which strongly confirmed him in opinions he had long entertained. He had often deemed it useless, in his country practice, to resort so carefully to the antiseptic methods adopted, perhaps, with propriety in city practice. He instanced some rare cases—one of wound opening the ankle-joint. In five or six days,

by the simple use of cleanliness, the patient began to get well and later on recovered without an untoward symptom. Another case—a man with a history of a general mash-up in a railroad accident, resulting in several wounds—without other antiseptics than ordinary cleanliness, the patient got well in some thirty five or forty days.

Dr. Morrison thought we could not be too careful in obstetric cases. He always uses antiseptics as a hand-wash for himself, and vaginal lavement for his patients, to prevent such disease as puerperal fever, etc.

Dr. John Neff, of Harrisonburg, highly appreciated the remarks of Dr. McGuire as confirmatory of his own experience and observations. In cases of doubt as to septic exposure, he uses carbolyzed cotton as a dressing for wounds.

Dr. J. E. Chancellor, of Charlottesville, thought no remark used in the discussion should serve as a license for the non-use of antiseptics. There is no excuse for neglecting every possible means of saving life or hastening recovery. Especially are antiseptics valuable in lying-in cases.

Dr. McGuire added that he would not leave the Society under the impression that he does not think favorable of antiseptics when they are needed. All he meant to say on this subject was that antiseptics, being a fashionable refuge of the day, there were many cases not needing their use in country practice. In this very place, where the Society is now assembled, with all of its mountain salubrity, he would not care for the details of antiseptics in the event he were called upon to perform an amputation or open a belly. The experience of the country doctors who had spoken and the many personal conversations he had with other excellent country practitioners sustained him in this saying. He was not speaking of lying-in cases. He had reference only to general surgical cases in his remarks.

Dr. Morrison referred to a case in which the Lister spray was used according to the great author's recommendations, and the resulting irritation of the carbolic acid killed the patient.

Dr. L. Lankford, of Bowers, could not bring himself to think that antiseptics were of so much less value in country practice than in cities. His early education after graduation was in a city hospital where all the details of antiseptic dressing and treatment were carefully carried out. He had seen doctors get off their horses in country practice, with sweaty hands, and without respect to the wash-bowl, at once enter upon the performance of a capital operation. He was un-

prepared to say what percentage of deaths or successes resulted, as compared with the practice of those who followed out every suggestion of the antiseptic method. But he thinks the doctor who does as he has known some do—without the slightest apparent regard for cleanliness—is guilty of a criminal act, especially in case of a vaginal examination of a puerperal woman.

Dr. Jesse Ewell, Sr., of Hickory Grove, stated that he had invariably made it a habit of his fifty years of practice to use soap and water on his hands before entering upon the performance of any vaginal examination or surgical operation.

Dr. Hunter, of Frederick county, during an epidemic of scarlet fever, had some obstetric cases. He always carried with him at that time a solution of carbolic acid in glycerine, which he used on his hands, and he did not have a puerperal disease of any kind.

Medicinal Properties and Therapeutic Application of Waters of Fauquier White Sulphur Springs, Va.—Dr. Alex. Harris, of Jeffersonston, Va., purposed to give a careful and rational explanation of the medicinal properties and therapeutic application of this water through its chemical constitution. The springs being at such an elevation—about seven hundred feet above sea level—the hygienic surrounding of the hotel and grounds are unsurpassed, this being plainly evidenced by the fact that the writer has not been called upon to treat a case of zymotic disease which had its origin on the premises during his thirty-five years' connection with the springs. The water is remarkable for its lightness and possesses a very strong sulphurous taste and smell. The quality of lightness enables the patients residing at the springs to ingest nearly twice as much in quantity than if it were an ordinary freestone water. The experience of Dr. Harris and others has shown the water to be primarily diuretic, diaphoretic, or purgative, and secondarily alterative and tonic. It gives, when first tasted, a perceptible stimulant effect, in some cases causing a sense of fulness of the head, in some few cases going so far as to produce headache. The reason for the remarkable therapeutic properties possessed by this water can be readily seen by a careful examination of an analysis of it. There are nearly three grains of iron phosphate, lime and magnesia in the gallon, and it can be understood how the tired brain is rested and the over-worked nervous system is built up by the use of these waters. The reader then compared the analysis of this

water with the analyses of 178 of the most important and best known natural mineral waters of this country and Europe, and showed how rarely the ferric phosphates were to be found in those waters—there being only two of this number which have any of this salt in solution, namely, the water under discussion (containing two grains to the gallon), and the Newbury (two-fifths of a grain per gallon). It can be readily understood how broad a range of therapeutic application the Fauquier White Sulphur waters possesses in those cases of chronic diseased action dependent upon loss of nerve-power. Not only did Dr. Harris draw upon his own record of practice for illustrative cases, but referred to Burke's work on the Virginia Springs for a number of instances where these waters had done so much good. The use of this water, according to Dr. Harris, is especially valuable in dyspepsia of neurotic origin, in dropsies, in certain instances of neurasthenia, etc.

Adjourned until 3 P. M.

AFTERNOON SESSION.—Dr. Joseph A. White, of Richmond, offered a resolution looking to the organization of a *Tri-State Medical Society*, representing Virginia, North Carolina and West Virginia. Adopted.

Therapeutic Value of Rawley Springs Water.—Dr. T. M. Miller, of Frederick county, in a paper on this subject, entered into a full analysis of the water, and compared it with that of the most noted and best visited springs of this and other countries. The especial point in Rawley water which renders its therapeutic properties so valuable is the large quantity of protoxide of iron placed in complete solution by the excess of carbonic acid contained therein. The iron being rapidly appropriated by the red corpuscles of the blood, the anæmic patient who uses the water is soon put into a condition where proper assimilation takes place. The water abounds in carbonates, not only of iron, but also of all the common alkalies to the exclusion of the sulphate.

Dr. F. M. Robertson, of Charleston, S. C., by invitation of the Society, also read a paper upon the same subject, the medicinal virtues of Rawley Springs water, in the course of which he very highly extolled its effects.

This paper has just been published in the *Transactions* of the South Carolina Medical Association.

Drs. Geo. T. Harrison, of New York city, and F. M. Robertson, of Charleston, S. C., by unanimous vote of the Society, were made non-resident Honorary Fellows.

Dr. Chancellor then yielded the chair to his successor, Dr. S. K. Jackson, of Norfolk, and was unanimously elected an Honorary Fellow of the Society.

The following Summer resorts extended invitations to the Society to hold its session of 1885 at their hotels: Rawley Springs, of Rockingham county; Alleghany Springs, of Montgomery county.

It was decided by vote to meet at Alleghany Springs in the Fall of 1885.

A unanimous vote of thanks for the extreme kindness and hospitality extended this year to the Society by the Rawley Springs management was passed, the management entertaining the members free of all hotel charge during the session.

Dr. Hunter McGuire then presented his paper upon **Intestinal Obstruction—Its Differential Diagnosis.**—He began by relating some illustrative cases, which showed the necessity of making, as far as possible, an early and positive diagnosis, for the purpose of operating if necessary. Yet he had seen patients recover entirely with but little or no treatment. He gave the different mode of production of this condition, and showed how operative treatment often offered great prospect of recovery. The paper was mainly confined to the diagnosis of this difficulty. He had seen a patient die in thirty-six hours, and had also seen others which recovered thoroughly after a complete condition of obstruction. He laid down, as a rule, the fact that no purgative should be given at first. This he considered one of the most important points to be remembered. He looked upon opium as the sheet-anchor in these cases. He criticised most unfavorably several of the older methods of treatment. He showed when he thought was the proper time for opening the abdomen, namely in certain cases, in thirty-six hours after the proper medicinal treatment had been faithfully tried.

Etherization by the Rectum was the title of a paper by Dr. Wm. H. Coggeshall, of Richmond, which will appear in the next issue of the *Virginia Medical Monthly*.

Adjourned until 7½ P. M.

NIGHT'S SESSION.—Dr. M. A. Rust, of Richmond, in a paper on **Typho-Malarial Fever**, reviewed the history of the disease as it first made its home in this country. He held that typhus and typhoid fever are not interchangeable, that one does not produce the other. During all the epidemics of typhoid fever in Richmond, the type has been generally mild, and mixed with malarial infection. Hence, often-

times it is cured by quinine. He narrated his experience with the recent epidemic in Richmond, which was popularly known as "the Richmond fever." He spoke of the thermometric curve peculiar to the disease. He laid great stress on the bacillus typhosus as an etiological factor. Sometimes purely local causes develop typhoid fever. As to treatment, he thinks, as a rule, the best medicine is no medicine. Cold sponging gives comfort. He uses bismuth when there is profuse diarrhœa. Spirits and beef tea are to be given when the heart's action becomes feeble, and the resisting power low. He uses for diet, boiled milk throughout the whole course of the disease. The prognosis is generally better if there be a stormy beginning.

Dr. Alban S. Payne, of Markham, Va., Honorary Fellow, read a paper on *Cerebro-Spinal Meningitis*. As he had often met with cases of cholera morbus and cholera infantum which could not be differentiated from cerebro-spinal meningitis, he would make a few remarks upon the disease known as cholera infantum. His remarks concerning meningitis were very apt, and were attentively listened to by the members. He had found the monobromide of camphor to be very valuable in treating these diseases. He blisters the nape of the neck with croton-oil, and usually gives a hot mustard bath. Quinine should be given at night or morning, and he was in the habit of giving some anodyne to control pain.

Dr. I. S. Stone, of Loudoun county, then read a paper upon the use of **Massage and Electricity in Hysteria and Allied Disorders**, from the point of view of the general practitioner. He went over some of the forms of hysteria and neurasthenia, and related his success in several such cases. He was a firm believer in the theory and practice of Dr. Weir Mitchell, and thought he had in several instances improved in some degree the methods adopted by that celebrated specialist. He showed how the ordinary country practitioner could successfully handle this class of cases, and illustrated the points mentioned by two or three very severe cases of nervous disease. Seclusion, he thought, was one of the best helps in treatment, especially in female patients, as the constant attendance of visitors to see and talk with the patient that "has such strange symptoms and so bothers the doctors," certainly does an enormous amount of injury. He believed in the value of a skim-milk diet in these cases, and he also used quantities of raw beef made into a broth, after the method of Weir Mitchell.

At 10:30 o'clock the Society was invited by the Rawley Springs management to a very handsome complimentary banquet. The embossed *menus* were engraved and printed for this special occasion, the tables were decorated with flowers, etc., and the wines were excellent. It was a remarkable affair to have been gotten up, off in the country, eleven miles from the railroad.

FOURTH DAY.—*September 12th—Morning.*—Convened at 9:30 A. M.

Malarial Fever.—Dr. John N. Upshur, of Richmond, opened the discussion by reading a paper prepared on the subject by Dr. R. B. Stover, of Richmond. The writer began with a history of miasm, presenting, up to the present year, all that is known on this branch of the subject. He then went into the causation of this condition, and referred especially to the fact that in Richmond, for the past ten years, whenever the streets have been torn up for the purpose of putting in new culverts, etc., fever has invariably followed the excavations. He also mentioned the fact that in that city there are certain portions where fever has followed the introduction of water from a certain part of the water-supply canal, when the other districts of the city have been entirely free from it. He showed that this was the case even where chemical analysis and microscopical examination failed utterly to show anything wrong with the water.

Dr. J. N. Upshur, of Richmond, then presented a paper on **Malarial Fever as it Occurred in Richmond in the Spring and Summer of 1884.**—He called special attention to the fact that fever of this type occurred generally in other parts of Virginia as well as in Richmond. The type of fever presented some peculiarities different from that ordinarily seen. No doubt the cause of the fever was entirely atmospheric. It will be remembered by the local profession that there was a great deal of rain during the Spring and early Summer. The reader had noticed on several occasions at night, and it was remarked by others, that there was a most peculiar odor in various parts of the city. It is manifest that the water could have been *no element* in the production of the fever, for the reason that if it had contained the germs of infection, the disease would have attacked all ages and all parts of the city alike, there being little difference in the constitution of the water whether it comes from the canal, or the river, or from the old or new reservoir. The subjects of the fever were mainly young people. Another fact: the fever pre-

vailed in other parts of the State where the inhabitants, it may be inferred, drank well-water, and not James River water. The march of influenza and epizootic disease is an analogous fact. The disorder prevailed from the first of May to the middle of June. The malarial influence during the present Summer has been apparent in all the prevalent acute diseases. The Doctor draws strong conclusions from the analysis of the drinking-water by Dr. Wm. H. Taylor, State Analyst, which has been recently published in the Richmond newspapers. Finally, all of the conditions of the weafher were favorable to the production of a malarial disease. An interesting feature of the fever was the coolness of surface when the thermometer indicated a high range of temperature. The doctor reports several cases as illustrative of the features of the fever, one of which is of special interest from the fact that, neither the mouth nor bowel being available at the period of greatest prostration, the patient was kept up by systematic stimulation by means of the subcutaneous injection of brandy. This patient recovered. Dr. Upshur also called especial attention to the presence of epigastric pain as a symptom diagnostic of malaria in children.

Dr. Wm. L. Robinson, of Danville, presented a paper on **Typho-Malarial Fever Peculiar to Danville.**—He stated that nothing is known as to the bacteria of typhoid fever. Typho-malarial fever is something different from simple typhoid fever under the influence of malaria. Quinine does not affect typhoid fever; it cures typho-malarial fever, especially when given hypodermically. Milk diet is not good in the latter fever; it is generally rejected by the stomach. Beef tea, with its natural salts, is much better adapted to such cases. Typho-malarial fever does not prevail in the mountains as does typhoid fever.

Dr. Thos. J. Moore, of Richmond, Va., said that what malaria is has not been decided. It has no known limits of territory. We simply know that heat, moisture and vegetable decomposition are essential factors. In wet sections of the country, we may do something by draining the marshes. He spoke especially of the two forms in which the disease generally manifests itself—the hæmorrhagic and the pernicious. As to treatment, in all grave cases use quinine hypodermically. In the same way, Warburg's tincture may be administered, as he first saw recommended by Dr. Metcalf, of New York. The combination of morphine with the quinine is sometimes required in order to quiet the nervous perturbations.

Dr. M. A. Rust, of Richmond, Va., remarked that the views expressed in Dr. Upshur's paper are in perfect harmony with his own. The sooner we do away with the term typho-malarial fever the better. He would only comment on two points:

1st. Such expressions as "atmospheric influences," or "something in the air," as pathogenic causes are misleading.

2d. "Typhoid fever modified by malarial poison." This expression involves the supposition that the pathogenic germs of both typhoid and malarial fever have entered the human body, and they produce, as allies or antagonists, a certain series of phenomena. We have no proofs whatever to support such a theory, and if we admit it, we might as well admit the term typho-malarial fever. But he had shown, in the paper read the evening before, that typhoid fever must necessarily present all grades and shades of severity, from zero to the maximum, and that slighter forms of typhoid fever, with a duration of a few days only, are frequently observed.

The President, Dr. S. K. Jackson, made a few remarks upon some of the points raised, and especially recommended the milk diet in typhoid fever. He was absolutely opposed to all starchy foods. He had at times, when using maltine, been able to allow the patient to take a little of that class of food. He made great use of strong beef-tea, and usually kept the patient on nothing but the latter liquid and milk through the course of the illness.

A paper by Dr. E. E. Field, of Norfolk, entitled *Yellow Chills*, was read by title, and referred to committee.

Dr. William Selden, of Norfolk, was elected an Honorary Fellow of the Society, and a considerable amount of routine business was transacted.

Dr. Joseph A. White, of Richmond, then presented a paper entitled **Some Remarks about Cataract, with a Report of Fifty-two Cases.**—After speaking of the mistakes often made in confounding other eye troubles with cataract, by careless practitioners, some of which are ludicrous and some serious in their tragical results, he gave a short history of the operation of "extraction" with the various modifications it has undergone. He advocated strongly the performance of iridectomy as increasing the chances of a successful result, in opposition to the recent tendency of the French school to return to Daniel's method, also showing its advantages as a preliminary operation in certain cases, as it divides and di-

minishes the traumatism. He gave an account of Foster's operation of "trituration of the lens" for ripening cataract, with a reference to some cases of his own, but considered that it has, like all other surgical operations, its attendant risks, and is as yet only on probation. After some remarks on the opening of the capsule, he passed to a consideration of the cases operated on in Richmond during the past four and a-half years—fifty-two in number. There were no failures in cases under seventy years of age, and only two over seventy years, as a result of the traumatism. Another patient lost his eye after recovery, from septic infection of both eyes, by a sponge used by a hospital attendant, setting up purulent ophthalmia. Anæsthesia was used in eleven cases only, and the most serious accidents during the operation, which occurred in nine cases, he attributed to the vomiting induced by the anæsthetic. He uses anæsthesia only in very timid or cowardly patients, because there is very little pain from the operation if he can trust to the statements of those operated upon. In regard to antisepsis in cataract operations, he thinks that it is quite sufficient to see that the most scrupulous cleanliness before and during the operation is observed, especially of all the instruments employed. He uses instruments as little as possible, and after the iridectomy does away with the blepharostat and uses the lids and his fingers to remove the lens. In regard to the secondary operation of cutting the capsule he considered it of great importance as increasing the visual acuteness and lessening the chances of subsequent reaction about the capsule and iris, and instanced a case in point where, from neglect of this precaution, a patient with good vision lost the eye eighteen months after, the trouble starting in the capsule, which had gradually thickened and wrinkled, ending in irido-capsulitis and cyclitis. Dr. White concluded his paper with a full report of a case of some physiological interest as exemplifying the accepted theory of vision. A man named Daniel —, of Weldon, N. C., had become blind with double cataract when seven years of age, was educated in an asylum for the blind, and was operated on in Richmond, Va., when thirty-two years old. The result was perfect vision in both eyes. He could judge nothing of the shape of an article until he touched it. He could not locate objects in space, and invariably miscalculated the distance when reaching for anything. He was afraid to walk about because he could not judge of the height or depth of anything in his way—such as gutters or curbstones. In fact he was less independent when he first recovered vision than before he was operated upon.

It was decided that the subject of "*Scarlet Fever*" should be the one for general discussion at next year's meeting, and Dr. Thomas J. Moore, of Richmond, was appointed to read the first paper on the subject.

Dr. H. M. Clarkson, of Haymarket, was elected to deliver the next Annual Address to the Public and Profession.

Adjourned *sine die* at 12 o'clock.

Analyses, Selections, etc.

Headaches.—Dr. J. W. Given, of Salem, Oregon, in the neatly-issued Proceedings of the Eleventh Annual Meeting of the Oregon State Medical Society, 1884, gives a resumé of what is known concerning some forms of headache that are well worth repetition.

He first speaks of *hyperæmic headache*. Adopting the view that the quantity of blood in the brain varies, he asserts that the increase or decrease in the quantity of cerebral blood may extend beyond physiological limits, and result in headache. He assumes the debatable position that the activity of an organ increases with its blood supply. Hence "the obvious indication is to lessen the amount of brain-work." "Excessive worry" will generally be found to constitute a more important causative element of hyperæmic headache than "excessive over-work." He thinks such "worries" and their occasions should be honestly stated, the trouble thus removed, quiet of mind restored, and thus relieve over-tension of the cerebral blood vessels and thus quiet also the "brain cells" which have been over-excited and too long over-strained. "If the cause of worry is one that will grow less with time, the headache may be relieved for the time being by bromide of potassium." Compressing the carotids will also diminish the amount of blood in the head." Plenty of sleep must be secured. Hot foot baths should be used to divert the blood from the brain. Brisk cathartics often have good effect. Blisters to the back of the neck are sometimes helpful. If the headache is due to systemic plethora, the lancet should be resorted to. General exercise is good. If hypertrophy of the heart is the cause, tincture of aconite and of veratrum to lessen the heart's action and arterial tension should be prescribed. Belladonna plasters over the heart sometimes quiets its turbulent action. In cases of cerebral hyperæmia, due to worry and over-work of the

brain, systemic anæmia often exists. Then chalybeate tonics are especially called for; but as a rule they should not be administered alone. Hyperæsthesia of the brain cells is probably best relieved by potassium bromide. But this agent "usually impairs digestion, and, if continued in large doses, will lessen the normal activity of the brain." Dispense with it, therefore, as soon as possible. When the blood-vessels have been so over-taxed as to greatly impair their elasticity, and hence are passively filled with blood, the patient will experience headache by over-turgescence when he lies down—by the law of gravitation, in short. When such a condition occurs, elevate the head by pillows, lie with the arms extended above the head, compress the carotids, and, in some cases, arrange for the party to sleep in a sitting posture. Brain work must be reduced to the minimum. Fluid extract of ergot, in commanding doses ought to be given, with a view of keeping the blood-vessels contracted. The "common cold-headache," "probably due to hyperæmia of the brain and a general toxæmia of waste products remaining in the blood, will usually be relieved by hot air baths, with very small doses of tartar emetic, with stimulants, as ammonia, quinia in large doses and alcoholic drinks, accompanied by mild laxatives. [It is not thought, in this community, that "quinia in large doses," is a stimulant.]

In *anæmic headache*, improve and increase the amount of blood in the head. Give good food and drink, plenty of exercise, and rest and sleep must be insisted on. No medicine can properly take the place of these means. Such patients flourish upon the same principles which a thrifty man applies to his horse. As medicines, iron and quinia, are the "stand-bys." Iron preparations least trouble the stomach when given two or three hours after meals. Fowler's solution of arsenious acid and cod-liver oil are useful—the latter especially in the anæmic headaches of children. If a weak heart exists, the recumbent position will [sometimes] do the double work of supplying the brain with blood and diminishing the heart's action. Digitalis also tends to make a weak heart strong by slowing its beats, thus affording it more time to take in blood. The anæmic headache which follows great loss of blood is often temporarily relieved by wrapping very hot cloths around the head. Alcoholic stimulants will also often afford temporary relief. Of course all abnormal drains should be corrected. In short, each pathological lesion causing anæmia should receive special attention.

Toxæmic headache, Dr. Given sums up as among the causes,

such constitutional troubles as "syphilis, specific fevers, retained biliary secretions and excretions, kidney and skin excretions, rheumatism, lithiasis, and possibly that mysterious something called malaria." When these are the causes of pain, protect the nerves against irritants by opiates, which also relieve pain. To avoid their constipating effects, combine it with belladonna or atropia, as best suits the case. Of course use mercury and iodides to cure syphilis. In cases of specific fevers, protect the nervous system against the poison [if a specific or other remedy is known that will do so], and also against excessive temperature. Cold sponging will relieve the temperature. "Time alone will exhaust the poisons." Bilious headaches are relieved by calomel and jalap. Chloride of ammonium is also useful. Nux vomica and strychnia salts, according to the manner proposed for administration, protects the nervous system, in general, against the depressing effects of retained biliary secretions. [Whatever authors, of an "experimental" turn of mind may say to the contrary, mercury *does* relieve, if any medicine does do so, biliary congestions, engorgements, or whatever is the condition that practitioners of medicine recognize and call by the common name of "biliousness."] Change the food and habits so as to bring the patient back to health. If excessive nitrogenous food is used, change the diet. Cathartics may give temporary relief, but they do not change the habit. Constipation of the bowels is a common cause. If he will not adapt his diet to his condition, he must have occasional purgatives. [Fluid extract of cascara sagrada is a remedy worth trying in ordinary cases of constipation that causes headache. We know of many that get on well under its empirical use.] In headaches due to renal secretions, opium renders the system partially tolerant of the presence of poisons. Eliminatives, such as diuretics, cathartics, etc., should be used. The salts of lithium are also serviceable. Hot baths should be used, a free action of the skin ought also to be promoted by clothing, etc. For the rheumatic headache, he advises the free use of alkalies and salicylate of sodium, with opium for the immediate relief of pain. Colchicum is demanded in cases of "gouty headache." Malarial headache is relieved by quinia, Fowler's solution and tonics. All depressing influences must be avoided. The headache of lithiasis is generally relieved by the use of alkalies and laxatives, with a diet chiefly of vegetables and fruit. Sick headache is probably due to an accumulation of waste products in the blood. In such cases, a thorough

emetic will not do harm, and, in many cases, will afford relief. A good cleaning out with improved compound cathartic pills or another good cathartic will usually shorten the attack. Let the patient abstain from all active exercise. Among the prophylactic agents used for sick headache are oxide of zinc, arsenic, iodide of potassium, etc. Let experience teach the patient as to the articles of diet and drink to be used, and as to the suitable forms and times of exercise.

Structural Headaches.—Inflammations, neuralgia, tumors, tubercles, gummata, etc., are among the lesions that cause this form of headache. *Inflammations* of the membranes require active cathartics, and also such remedies as potassium bromide, chloral-hydrate, large doses of fluid extract of ergot, and cold to the head with the ice-cap. Absolute rest, with the exclusion of all irritants of the sensorium, must be obtained. *Neuralgia* requires quinine, iron, Fowler's solution, morphia, and atropia for speedy relief. Of course, these empirical directions are to be used only after excluding local lesions. *Tumors* may be suspected if there be persistent headache, accompanied by a "choked disk" and vomiting. The resultant headache may sometimes yield to large doses of potassium iodide. Opium relieves the pain. Syphilitic gummata are generally removed by overwhelming doses of potassium iodide—200 or 300 grains daily. Nothing is curative in *tubercular headache*. Opium affords temporary ease.

Dynamical Headache.—Let the patient learn to practice hygiene, and live according to his strength. Let him sleep as much as possible, never engage in anything that will greatly tax his vital powers, and lead a quiet, easy life. The best medicines are hyoscyamus with camphor, valerianate of ammonia—using opiates if necessary. Weak galvanic currents passed through the head will sometimes improve the nutrition of the nerves.

Reflex Headaches.—Potassium bromide is the best agent to relieve the pain of a reflex irritation. Among the frequent causes of reflex headache which must be inquired into and treated are defective teeth, eye troubles, nasal catarrh, ear diseases, dyspepsia, ovarian and uterine diseases, urethral and vesical irritation, etc. The headache of teething children is best relieved by potassium bromide, and the several other conditions named should be appropriately treated.

Pediatric Aphorisms.—We take the following excellent points on the hygienic and medical treatment of children

from the *Obstetric Gazette*, August, 1884: The following aphorisms of Professor Letamendi are quoted in *El Dictamen* of May 10, 1884:

1. Children are like the mob; they always complain with reason, although they cannot give the reason why they complain.

2. Always look at the lips of a pale and sickly child; if they are of a deep red color, beware of prescribing tonics internally. At the outset you will congratulate yourself, but in the long run you will repent of having employed them.

3. As a general rule, a sad child has an encephalic lesion; a furious child, an abdominal one; a soporific child has both, though indistinctly defined.

4. An attendance on children produces in the mind of an observant physician the conviction that the half, at least, of adult transgressors are so through morbid abdominal influences.

5. A sunny living room, a clean skin, and an ounce of castor oil in the cupboard—these are the three great points of infantile hygiene.

6. To dispute the clinical value of tracheotomy in croup is a waste of time to no good purpose. Croup or no croup, if there be a positive obstruction to respiration in the larynx, it is but according to reason to open a way for sublaryngeal respiration. In the days of more knowledge and less nonsense, tracheotomy will be ranked among minor surgical operations.

7. Dentition is a true multiple pregnancy in which the uterus and its fetuses become petrified in proportion as they grow. It is not the direct or the eruptive pressure, but the lateral pressure of all together, that is the most dangerous. It is from this that so many cerebral symptoms appear which can in no way be relieved by incisions of the gums. The only recourse against the danger of this transverse pressure is to give the child more nourishment, in the hope that as the general condition is bettered the local condition will also improve.

8. If the incisors of the first dentition are serrated it is bad, but if those of the second formation are the same, it is worse. It foretells a number of lesions arising from deficiency of mineral salts in the tissues. There is one only exception, and it is an important one. When the serrated incisors are seen in strong children in whom the fontanelles have closed early, it is a sign of a robust constitution. In-

stead of a number of small and sharp dentitions, there are a few large blunt ones.

9. To regard the eruption of the teeth as the sole factor in the general process known as the first dentition, is to perpetuate a sort of a medical synecdoche. Children get their first teeth because they are at the same time getting a second stomach and second intestines.

10. The body of a child possesses such a degree of "acoustic transparency" that in cases of necessity or convenience auscultation may be practiced with the hand, converting it into a telephone which will reveal as much to the physician as even his ear could do.

11. In practice it is well to distinguish with precision a case in which disease is due to lumbricoids from one in which lumbricoids are due to disease. For in the former case anthelmintics are of service, but in the latter they do harm.

12. Since, until a child is able to talk clearly, his relations with the physician are purely objective, it is very necessary that we should study as carefully as do the veterinarians the exact correspondence between lesions and the expression of the patient.

13. If you wish to cure rapidly and well joint-disease in infants, you must treat them as you would a conflagration—douches, douches, and more douches, until you have succeeded in extinguishing them.

14. The entire system of the moral relation between children and adults should be changed. To speak to them incorrectly merely because they cannot pronounce well; to excite their fears and arouse their weird imaginations simply because they are easily frightened and impressionable; to stimulate their vanity because they are naturally inclined to be vain—these and other similar actions are not only wrong, but absurd.

15. There is finally a danger to the women of contracting a vice as yet unregistered in the annals of concupiscence—mastomania, or the sensuality of nursing. When this physiological act degenerates into vice, nursing becomes so frequent as to be nearly continuous, and the result is ruin to both mother and child. Finally, the physician must here, as always, be at once wise, discreet, of good judgment, and firm.

Treatment of Cholera.—One of the most concise and practical articles on cholera which we have so far met with this

year appears in the *Polyclinic*, August 15, 1884, from the pen of Dr. S. Solis-Cohen. We abstract that portion of the paper referring to the treatment of the disease :

It is a well-established fact that severe attacks of cholera may be prevented with almost absolute certainty by proper treatment of the premonitory symptoms.

In nearly every case, there is a precedent stage of painless diarrhœa, lasting from a few hours to several days. Sometimes it may be recognized. Sometimes it cannot be distinguished with certainty from other forms. It is frequently associated with vomiting. This diarrhœa is not conservative, but should be checked at once. Rest, recumbency, regulation of diet, and the administration of an anodyne and astringent remedy will usually suffice to effect this. In domestic practice, laudanum or paregoric may be used in full doses, and it would be well to instruct patients to resort at once to these drugs upon the occurrence of diarrhœa, and then send promptly for the physician. The Sanitary Committee of the Board of Health, Philadelphia, in 1866, recommended the following: thirty drops of laudanum with twenty drops of spirits of camphor, and thirty drops of tincture of capsicum, in sweetened water, every half hour, or after each evacuation. A few minims of chloroform may be added. Ringer speaks very highly of camphor alone, both in this preliminary diarrhœa and in the first stage of cholera. He gives four to six drops of strong spirits of camphor every ten minutes, till the symptoms abate, and hourly afterward. Sometimes he mixes it with a little brandy.

The efficacy of prompt treatment of this preliminary diarrhœa is attested by all authors, by all statistical reports, and especially by the results of house-to-house visitations, instituted for the purpose of discovering and treating cases.

When the case is first seen in a genuine choleraic seizure of diarrhœa and vomiting, the so-called stage of spasm, the treatment must be conducted more actively. The patient must lie down immediately, and be kept perfectly quiet. He must not get up to go to stool, and should resist, as far as possible, the desire for evacuation. The diet should be of the lightest character. Rice-water and ice may be given in moderation. Opium is the best drug to employ; and a salt of morphine the best preparation. Flint prefers placing the morphine salt dry upon the tongue, over the hypodermatic method. A grain is rarely too large a dose for an adult, and should be repeated as necessary. Prompt effect being important, some risk of narcotism may be incurred.

Astringents, such as tannic acid, acetate of lead, subnitrate of bismuth, etc., may be added, if the stomach will tolerate them. Creasote, hydrocyanic acid, iodine, chloroform and camphor may be tried, to prevent or control spasm and vomiting. Surgeon Jessop, of the Indian Army, advocates hypodermatic injections of chloral, to relieve spasm of unstripped muscular fibres, and insists on the maintenance of the upright or semi-reclining posture. Bartholow recommends the combination of morphine with the chloral. Ice to the spine is lauded by Chapman. The nitrites seem indicated, and amyl nitrite by inhalation has the endorsement of Bartholow. There is a difference of opinion as to the utility of frictions, warm baths, sinapisms, etc., in this stage. They should not be resorted to as a matter of routine, nor without positive indications. Rest is by far more important. When these measures are successful, rest, regulation of the diet, tonic treatment, complete the cure.

Rectal injections of brandy, the application of heat to the surface, gentle frictions, gentle stimulation of the surface with mustard or capsicum, the administration of diffusible stimulants (ether, turpentine, ammoniated alcohol), concentrated nourishment, water or ice in as large quantities as can be well borne, applications of the galvanic current, are to be employed in the stage of collapse.

Opium may be given by the mouth or rectum, but not hypodermically, and great care must be taken to avoid induction of narcotism.—(Flint).

The kidneys should be kept active. Wrapping the patient in blankets and placing him upon a mass of setting plaster of Paris, has been effective in restoring body heat in collapse, and saving life in consequence.

Intra-venous injections of whiskey, milk and saline solutions are favorably mentioned by Bartholow.

Recovery from the algid stage is doubtful. Nevertheless, some cases recover without treatment, and some in spite of treatment. The treatment of reaction and of convalescence is conducted on general principles sufficiently obvious. Precautions against uræmia are to be taken.

Calomel has been advocated, combined with camphor, in the premonitory stage, and later with small, frequent doses of opium. Under the stimulus of Koch's supposed discovery of the cholera-bacillus, we may expect the advocacy of mercuric chloride. Ringer, indeed, has long maintained the advantage of weak solutions of the latter (gr. j. to f $\frac{3}{4}$ x, of which f $\frac{5}{8}$ j is to be given hourly) and of gray powder (gr.

one-sixth hourly) in infantile cholera, and choleraic diarrhœa (cholerine?). Cholerine, the simple diarrhœa prevailing during epidemics of cholera, is to be treated in the same manner as the premonitory diarrhœa of cholera.

The disinfection of the patient's excreta, clothing, bed linen, etc., is, of course, to be scrupulously observed, and the hygienic principles applicable to the management of all diseases apply here with peculiar force.

Book Notices, &c.

Theory and Practice of Medicine. By FREDERICK T. ROBERTS, M. D., B. Sc., F. R. C. P., Professor of Materia Medica and of Clinical Medicine, at University College, etc. With Illustrations. Fifth American Edition. Philadelphia. P. Blakiston, Son & Co. 1884. (For sale by West, Johnston & Co., Richmond.)

It would seem a work of supererogation to give a review of a book which has passed successfully through four editions, and has come to the fifth because there is a call for it. Especially does this seem the case with a work which has been so favorably received by the profession in America as *Roberts' Practice*; It has, however, become so much the custom to issue a reprint of a book, and call it a new edition, that it is always well to inquire if the so called "new edition" really contains new matter, and to see if it has been thoroughly revised, or only reprinted.

In looking over the fifth edition of the work under consideration, the reader is at once struck with the material improvement in the arrangement of the opening chapters on Etiology, Symptomatology, Diagnosis and Treatment. While some of the matter which has hitherto seemed superfluous has been omitted in the new Edition, much that is new and valuable has been added. Additions have also been made to the chapters on General Diseases. Passing over the entirely new matter on hemophilia and the hæmorrhagic diathesis, it is pleasing to note that the hygienic management of contagious diseases, and the prevention and limitation of epidemics has now received attention in this edition for the first time. Though not occupying much space, the remarks on this subject are extremely practical, and such as are to be found in but very few works on general medicine. Indeed, it may be said that the whole chapter on Contagion and Epi-

demics is one of great practical value. The amount of ignorance on these subjects is, in view of their importance and bearing on the public health, very lamentable; and those who may wish to get the latest and most practical ideas regarding them would do well to read what Dr. Roberts has to say upon the subject.

Not only has new matter been added regarding diseases which were either very briefly, or not at all discussed in previous editions of the work, but the author has revised both his pathology and sections on treatment, and many new illustrations have been added. As would be expected in a systematic work, the subject-matter of which comprises less than a thousand pages, all useless and unprofitable discussion of mooted questions and unsettled theories has been omitted, thus making it a useful book for the student.

A careful survey of the book shows that it is really a new edition, and not merely a reprint of a former edition. The subject-matter is excellently arranged, and the style is clear and concise, and *facts* have been clearly and briefly set forth. To those who are familiar with Dr. Roberts' articles in *Quain's Dictionary of Medicine*, and his contributions to the current British literature, it is like wine that needs no bush; while those who are as yet unacquainted with his writings should lose no time in familiarizing themselves with them. It is a good book for the general practitioner, and its merits as a text-book seem to be sufficiently guaranteed by the favor with which it has been received by teachers, and by its wide use among students. It is completed by a good index.
Eg.

Hoopeer's Physicians Vade-Mecum. Tenth Edition. Revised by WILLIAM AUGUSTUS LEE., M. B., Cantab., F. R. S., F. R. C. P., etc., and JOHN HARLEY, M. D., Lond., F. L. S., F. R. C. P., etc. Vol. I New York. Wm. Wood & Co. 1884. 8vo. Pp. 338. (By mail from Publishers.)

We have been looking for the second volume of this work, which has not yet come to hand—although this first volume was issued in May, 1884. It is something of a misfortune for doctors not to be able to take many journals so as to see the varying criticisms passed upon them. Publishers, of course, reflect credit upon those journals that mention their publications approvingly; but it is not always that editors can do as they would like to do. The book before us, to speak from our standpoint, is not worth the purchase-money for the *general* practitioner. The title—*tenth edition*—and

the worthy names of its authors at once show that we have been careful not to speak more candidly than we think. We do not propose to say that the work is of less value than it is. We mean only to imply that in style of plan, often times in language for use, and sometimes in direction, he can do without it, although it claims to be "a manual of the principles and practice of physic, with an outline of general pathology, therapeutics and hygiene."

A preacher asked, as he was about to go to preach the funeral of a reprobate, "Can I say anything hopeful as to his future?" The friend said, after recounting to the minister at length the misdeeds of his late associate, "Yes sir, he was a good smoker." So we may say that our authors are mostly compilers from the good old sayings of 'the good old authors;' with the exception that their statements are sometimes not well quoted when aphorisms are presumed to be intended, or when "the times" they said the remembered thing, are considered with reference to the present day, are almost forgotten.

Practical Manual of Obstetrics. By E. VERRIER, Lecturer on Obstetrics in Faculty of Medicine, of Paris. Fourth Edition. Enlarged and Revised. 105 Illustrations. First American Edition, with Revision and Annotations by EDWARD L. PARTRIDGE, M. D., Professor in Obstetrics in New York Post-Graduate Medical School. New York. Wm. Wood & Co. 1884. 8vo. Pp. 395. (From Publishers.)

This book has specially interested us. It is a good one. It is our province mainly to suggest to the readers of this *Monthly*, in their effort to select good books, what books to get so far as their purse allows. It is a work—not of much pretensions, although the more serviceable because of that—which will supply the proper want of any town or country doctor as an authoritative guide. Its wood-cuts help the text; the text will either refresh the reader's memory, or instruct him as to what he should know. It is an excellent "Manual." We have no hesitation in commending it. We have read it carefully. Some may not think of it as favorably; but we ask the critics, wherein is it less worthy of adoption as authority than many other recognized works of standard value? Remembering that most of the suggestions it contains bear common sense on their mention, and that we have pursued, in practice, a number of them, with satisfaction, we must say it, that this is as good a "Manual of Obstetrics" as we know of.

Editorial.

Medical Society of Virginia.—The Fifteenth Annual Session of the Society convened at Rawley Springs, Rockingham county, Va., on Tuesday evening, September 9, 1884, and the daily meetings were not concluded until noon on the succeeding Friday. It has rarely been the case that such important business as was this year transacted has ever been before the Society. The selection of the proper men to compose the Medical Examiner's Board was a matter requiring careful and conscientious deliberation. The thirty-two gentlemen who were elected to this dignified but annoying position, we think fairly represent our best Virginia practitioners, and there is hardly a name that we would desire to see changed. The manner of choosing the different nominees, as finally decided upon by a majority, we think, of only four votes—*i. e.*—the three names receiving a plurality of votes in a conference of the members present from each Congressional District being placed in nomination—[while not pleasing to many was accepted with cheerfulness by all,] and it is perhaps as fair a plan as could have been adopted. The weakest point in the method was apparent in those cases where only one or two doctors from a certain district were in attendance. It is greatly to be hoped that there will be no hitch in the organization of the Board from now on, and that, faulty as the enactment providing for its constitution is, its work may result in great good to the people of the State, especially in those retired sections where the citizens have hitherto been under the annual infliction of travelling quacks.

The papers read, and the discussions thereon, during the meeting were, if not in many respects superior, certainly quite up to the level of those of past years, the articles prepared by Drs. McGuire, and George T. Harrison, of New York, being especially full of practical hints. Our readers will find a complete summary of the whole proceedings in this number of the *Monthly*, which has been delayed in its publication because the Editors were desirous of presenting to its readers a fairly full account of what was done at the session.

Special mention should be made of the excellent manner in which the retiring President, Dr. Chancellor, presided over the Society's deliberations, the fairness of his rulings, and the urbanity of his personal manners, being favorably

commented on by many. Our newly-elected President, Dr. Samuel K. Jackson, of Norfolk, occupied the chair a sufficient length of time to enable the members to see that the Society had made a good choice.

What can be said sufficiently in the way of praise for the Rawley Springs management, whose most welcome guests the members of the Society were? From first to last the physicians and their families present were made to feel that they were at home, not only by the polite and busy Mr. J. Watkins Lee, the hotel manager, and Mr. Houck, the Company's President, but also by every one else connected in any capacity with the Rawley Springs Company. The banquet given to the Society by the management on Thursday night would have been called a success in a large city, but at Rawley—"twelve miles from a lemon"—it was simply wonderful. From the bills of fare to the last wines all was a great credit to the founders of the feast.

Another feature not to be omitted in mentioning the meeting, was the beautiful exhibit made by Mr. Lambert, of St. Louis, of his two specialties "Listerine" and "Lithiated Hydrangea." His enterprise in bringing the entire outfit from that city to a hotel perched away up on the side of a mountain eleven long miles from a railroad, was very plainly shown, and highly praised by all present. He found no need to expatiate on the merits of his pleasant disinfectant, as physicians from all parts of the State were already familiar with its value. It is perhaps needless to say that as Mr. Lambert is a Virginian by birth and education, and a Western man by adoption, there was not so much to be astonished at in his enterprise and liberality.

No personal fault could in any way be found with the retiring Secretary, Dr. Robert G. Cabell, Jr., by the re-election of Dr. Landon B. Edwards. It is remarkable that a gentleman previously inexperienced in such a position, as was Dr. Cabell, could so thoroughly and perfectly perform the manifold duties falling to the lot of that official, as has been the case during the past year. Dr. R. T. Styll, of Richmond, continues as Treasurer, by unanimous vote.

The next Annual Session will be held at Alleghany Springs, Montgomery county, Va., at such time as the Executive Committee of the Society may decide upon, the Springs management having cordially invited the members to become their guests during the session.

The meeting just past was remarkable for the large attendance of members and the number of new applicants for

membership, there having been over 125 of the former, and about fifty-five of the latter. C.

St. Lukes Home for the Sick.—We congratulate the excellent management of this institution upon their successful opening for this year. As this is chiefly a surgical hospital, and as most of the patient's rooms or dormitories are already spoken for, we would advise doctors outside of this city to make applications at once for their referred patients. We have no authority for saying this much about St. Lukes' other than general statements and something of personal information that has come to us unofficially and without the slightest knowledge of the officials. The Home has a capacity not exceeding fifty patients. Dr. Hunter McGuire is, practically, the medical man of the "Home." He is aided by medical assistants of ability who pay continuous attention to the wants of patients, under Dr. McGuire's direction. We do not know of a private hospital that is better managed, nor where more thorough professional skill is in control.

Mr. Lawson Tait.—This celebrated Ovariologist, since the close of the session of the British Science Association in Montreal, has been enjoying the hospitalities of some of our American practitioners. On September 11th and 12th, he, with his wife, was the guest of the well-known Dr. Albert Vanderveer, of Albany, N. Y., who tendered him a formal reception on the evening of the first-named date. The Medical, legal and clerical professions of Albany were represented very fully at the dinner, and all united in a cordial welcome to the distinguished surgeon. While in the city he performed the operation of ovariectomy upon a young lady patient, the local journals noting the fact that the incision was but two and one-half inches long, and the operation successfully concluded in ten minutes. Mr. Tait left for Philadelphia on the 12th, and was there received as the guest of the members of the Obstetrical Society. He sails for England on the 20th.

Dr. J. Edgar Chancellor, late President of the Medical Society of Virginia, and for some years the efficient Demonstrator of Anatomy in the Medical Department, University of Virginia, has accepted the call to the Chair of Obstetrics and Diseases of Women and Children in the Medical Department of the University of Florida, located at Tallahassee, Fla., and known as Tallahassee College of Medicine and Sur-

gery. Dr. Chancellor will still retain his domicile in Virginia, at his beautiful home near the University of Virginia, spending his Winters South, as for several years past.

Fluid Extract of Corn-Silk.—During the past two years the demand on Messrs. Parke, Davis & Co., for their fluid extract of corn-silk (*stigmata maidis*) exhausted their stock, and rather than supply, as some manufacturers have been in the habit of doing, a preparation of the dried material, which they maintain is inert, they declined orders. This year they have taken time by the forelock, and have, during the season which has just about closed, laid in and properly preserved for future use an immense stock of the green material. The profession who may have occasion to prescribe this demulcent diuretic in the vesical troubles for which it is so highly extolled, may therefore depend on Messrs. Parke, Davis & Co. for a supply of a reliable preparation of it.

Medical College of Virginia.—We are gratified to learn that this State institution has opened encouragingly to the Professors in charge. There are about sixty students. We do not know how many of these are State students or how many are “complimentary.” But the important thing, after all, is to make a success of this lately broken down State College. We hope it may get upon the level again of the respectable medical schools of the country. Except as a State institution, which bears the name *Virginia* upon its face, we confess that we would have had less to say about it. It will always, however, be a pleasure to us to help promote “whats good” in our State medical educational institution.

Dates and Places of Next Meeting of Some State Medical Societies.—We will add to this list from time to time.

Minnesota State Medical Society will convene in St. Paul, June 16th, 1885. Dr. C. H. Boardman, St. Paul, Secretary.

Michigan State Medical Society, Port Huron, June 9th, 1885. Dr. Geo. E. Ranney, Lansing, Secretary.

Ontario (Canada) Medical Association, London, June, 1885.

Maine Medical Association, Portland, June 9th, 1885. Dr. S. W. Johnson, Belfast, Secretary.

Indiana State Medical Society, Indianapolis, May 12th, 1885. Dr. E. A. Elder, Indianapolis, Secretary.

New Hampshire Medical Society. About June, 1885. Dr. G. P. Conn, Concord, Secretary.

Colorado State Medical Society, June, 1885. Dr. Hause, Greeley, President.

The Delay in the issue of this number has been due to a combination of causes which it was impossible to prevent. The October number is in the printers' hands.

American Public Health Association.—The Twelfth Annual Meeting of this Association will convene at St. Louis, Mo., Tuesday, October 14th, 1884, at 10 A. M., in Leiderkranz Hall, corner of 13th street and Chouteau Avenue. The session will be of unusual importance. President, Dr. Albert H. Gihon, United States Navy, Washington, D. C.; Secretary, Dr. Irving A. Watson, Concord, N. H. Some dozen or more papers have been promised from authors of eminence.

A Number of Book Notices remain over until the next issue for want of space in this number, as well as because of our haste to get the September number to our subscribers.

Dr. Bossana, of the Pharo Hospital, at Marseilles, telegraphed on September 9th, that Drs. Reitsch and Ricati had just informed him that several animals which they had inoculated with Dr. Koch's microbes had died with choleraic symptoms—results which Dr. Koch had failed to obtain.

Obituary Record.

Dr. Robert Spotswood Payne, of Lynchburg, Va., died at his home September 28th, 1884, in the seventy-sixth year of his age. He was stricken by paralysis some three or four months ago, up to which time he had enjoyed excellent health. After the immediate shock of his paralytic stroke had passed away, his consciousness returned, and his mind was as clear as ever. His affliction was borne with fortitude and patience; and although he saw that his days were numbered—that he could never again enter upon the activities of life, his christian resignation to the affliction was a subject of remark by all who visited or waited upon him. He was ever cheerful when suffering, and thought continuously of the sufferings of his friends and patients of whom he always tenderly inquired.

Dr. Payne was born in Goochland county, Va., January 9th, 1809. He graduated in medicine in 1831 from the University of Pennsylvania. He immediately established himself in practice in Lynchburg, Va., where he resided until the day of his death. As he grew in professional reputation,

he also became known more and more as a useful and popular citizen. Even against his solicitation or wishes he was elected member and President of the City Council for several terms, of the local Board of Health, also of the City Board of Education, etc. During the war he was in charge of the Lynchburg Confederate hospital. Immediately after the war he entered actively into the organization of the Lynchburg Medical Association, of which he was made President. At the organization of the Medical Society of Virginia, in 1870, he was elected President, of which he was afterwards elected an Honorary Fellow. The Society never had a more earnest, untiring worker in its behalf, nor one who did it so much good. In 1876 he was a delegate from Virginia to the International Medical Congress. In fact, so many honorary positions in the gift of the Virginia profession did he hold that it would require too much space to note them all. He was for many years a faithful member of the Presbyterian church, and his christian influence is impressed upon all who knew him.

At a full meeting of the physicians of Lynchburg at the residence of Dr. D. A. Langhorne, to take action on the death of Dr. Robert S. Payne, Dr. T. L. Walker was called to the chair, and Dr. E. A. Craighill appointed Secretary.

On*motion the Chair appointed Drs. Thornhill, Langhorne and Blackford, Committee on Resolutions, who reported the following, which were adopted without dissent:

WHEREAS, The Almighty has, in His providence, removed from among us our friend and brother, Dr. Robert S. Payne, the oldest physician in our community—one noted for his skill, remarkable for his gentleness and kindness in the sick room, and for his gentlemanly bearing in all the walks of life. Having been an earnest and energetic practitioner in our midst for over fifty years, until he was stricken with disease about three months since, his professional career was characterized by great purity and unselfishness, always kind and courteous to his juniors, frank and open with his compeers, he died rich in honors as well as ripe in years. During his long and useful life he was called to various positions of honor and trust by his fellow citizens, and especially did his own profession delight to honor him, calling him to the Presidency of the Lynchburg Medical Association, and also the first Presidency of the Medical Society of Virginia on their organization after the war. Therefore be it

Resolved, That while we greatly deplore his death, and look upon it as a sad loss to our whole community, and es-

pecially to the profession to which he was so great an ornament, we entertain the brightest hopes for his future, believing that our loss will be his eternal gain.

Resolved, That we extend our heartfelt sympathy to the family and relatives in their sad bereavement.

Resolved, That a copy of these resolutions be sent to the family of the deceased and published in our city papers; also, be sent to the *Virginia Medical Monthly*, *Atlantic Medical Journal* and *Southern Clinic*, Richmond, for publication.

A resolution was adopted requesting the members of the medical profession to attend the funeral in a body, and that the Chair appoint ten physicians to act as pall-bearers, which are as follows: Drs. D. A. Langhorne, Benj. Blackford, Frank Spencer, G. W. Thornhill, A. I. Clark, W. T. Walker, J. W. Dillard, Carter Wade, Charles Slaughter, W. H. Baker.

T. L. WALKER, *Chairman*.

ED. A. CRAIGHILL, *Secretary*.

Joseph Janvier Woodward, M. D., died suddenly, near Philadelphia, on Tuesday, August 19th. He was born in that city in 1832, and received his academic and medical education there. He graduated in medicine from the University of Pennsylvania in 1853, and began city practice at once. In August, 1861, he entered the service of the United States Army as Assistant Surgeon, and served with the highest distinction throughout the civil war—receiving promotion several times. During the war he made some very valuable observations on camp dysentery and typho-malarial fever, being we believe the first to point out accurately what we now understand as the exact peculiarities of the latter condition. He also invented an instrument by which the myopic condition of the eye can be exactly determined. In 1866, after several brevets for “faithful and accomplished services,” he was made Captain and full Assistant Surgeon, and in 1876 was promoted to the rank of Major and Surgeon. In 1866 he was selected for the great duty of editing the “Medical and Surgical History of the War of the Rebellion,” and soon showed how well qualified he was for this gigantic task. His name will be always inseparably connected with this monument of industry. During his active life he has presented to the profession many studies of interest, being a ready and fluent writer. When President Garfield was shot he was one of the first surgeons in attendance, retiring with Drs. Redburn and Barnes on September

7th. The circumstances of his death are extremely tragical. Sometime before that event he was allowed absence from the service on sick leave, and was a patient at a private institution on the outskirts of his native city. He had been apparently improving from the morbid condition into which his illness had thrown him, when, on the morning of the day mentioned, as he was descending from his sleeping-room to the breakfast-hall, he stepped out upon the roof of a high porch, and without a word threw himself to the ground, undoubtedly temporarily insane. His melancholy death occurring at a period when he should have been in the full enjoyment of his physical and intellectual powers, shows plainly that he had tried to do too much, and was one of the many instances so often witnessed in the profession of a man who had worn himself out before his time.

Sir Erasmus Wilson, LL. D., F. R. C. S., died in London on the 8th of August. Born in 1809, he became a member of the Royal College of Surgeons in 1831, Fellow in 1843, Member of the Council in 1870, and President in 1881. He began his career as a surgeon, but soon turned his attention to the department of Diseases of the Skin, and as a dermatologist, his name will ever be known in the profession. His most excellent treatise on skin diseases became a standard on the subject as soon as published, and, passing through several editions, is to-day as valuable as ever. His theories on the parasitic origin of certain skin diseases have been combatted, but his skill in diagnosis, and his superb teaching in the therapeutics of affections of the skin have never been surpassed. He was one of those fortunate practitioners who have been enabled to reap a fortune from their specialties. He made many gifts of money to hospitals, founded and kept in life many charities, and to the commoner classes of the English people he is best known as the man who, from his private means, provided for the transportation from Egypt, and the erection in London of Cleopatra's Needle.

Dr. T. Stanley Beckwith, of Petersburg, Va., died at his home September 1st, 1884, after a prolonged illness. He was a good physician, a popular citizen, and an upright christian. By resolution, the entire medical profession of Petersburg attended the funeral in a body, many of whom served as pall-bearers. He was a member of the Medical Society of Virginia, and, so far as his health allowed, always took an active interest in what concerned its welfare.

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Original Communications.

ART. I.—**Rectal Etherization.*** By Wm. H. Coggeshall, M. D., Richmond, Va.

Mr. President and Fellows of the Society:

There has been so much written of late concerning this method of etherization, that it has occurred to me that a few words relating to the process and its statistics would not be unworthy of being presented to you. I have an experience of small extent to offer you upon this lately discussed subject, and it seems best that before, relating the details of my clinical knowledge concerning rectal etherization, I should give a brief history of what are the general facts known in reference to this method.

To begin with: The process of anæsthesia by the rectum is by no means as modern in its theory and employment as many writers in medical journals seem to believe—the first suggestion of its possibility in the human being having been given by M. Roux, of Paris, in 1847. He merely thought of, and presented the idea, without developing it into material action. He, as far as I have been able to determine, was the first to publicly present to the professional world the possibility of procuring a condition of insensibility by ad-

*Read before the Medical Society of Virginia, at the 15th Annual Session, held at Rawley Springs, Va., Sept. 9, 10 and 11, 1884.

ministering ether per rectum, and his ideas upon the subject¹ were quickly caught up by one of his confreres, Dr. Vincente-y-Nedo,² who faithfully followed up the enquiry by injecting ether in liquid form into the lower bowel of rabbits, but whose experiments led to no further results at the time, as he for some reason did not experimentalize upon the human body.

The next year, (1848,) M. Marc Dupuy, of France, investigated the effects produced by the injection of diluted ether into the rectum of the lower animals, his dilutions being of varying percentage of water. He found that it was possible to produce a condition of insensibility, but at the cost of considerable injury to the mucous membrane of the large intestine; and finding such serious damage ensuing upon the parts involved, he went no further in the study, and made no attempt to demonstrate the feasibility of anæsthesia by means of ether per rectum on man.

During the year 1847, Prof. Pirogoff, of Russia, had been pursuing the same subject, independently of any other observer, and was probably the first person to really induce insensibility in the human being by means of the vapor of ether introduced into the rectum. He seems to have made very careful observations, and, fully recognizing the advantages of the method, urged the adoption of the process³. He recommended a suitable apparatus for the proper use of the vapor, and soon afterward other forms of instrument for the purpose were advised by different writers, and for two years or more the process was employed by different Continental surgeons, notably by M. Simonin, of Nancy⁴.

¹Compt. Rendu de l' Academie des Sciences, Feb, 1, 1847.

²Gazette Médicale de Paris, 1847.

³Recherches pratiques et physiologiques sur l'etherization, St. Petersburg, 1847.

⁴It has seemed strange that this rectal method has been looked upon as such a novelty in America by late writers, as Stillé in his *Therapeutics*, 4th ed., 1874, Vol. II, pg. 108 refers to it as follows: "The method of Pirogoff, which consists of injecting the vapor of ether, and ether itself largely diluted with water, into the bowel, has been condemned by some who have used it, on the ground of its occasioning extreme flatulent distention of the abdomen. But many of those who have employed it to relieve painful internal maladies, such as neuralgia, spasm of the muscles of deglutition, lead colic, inflammatory pains of the joints, and cancer of the intestinal tube, report favorably of its anodyne and antispasmodic effects." Stillé quotes Canstatt's *Jahrbuch*, 1849, pg. 190, as authority for these statements.

The method, like many other novelties, after a short time passed into obscurity, and although probably used for some time past in Scandinavian hospitals, the general medical world has heard nothing of it for about thirty years until quite recently, when the casual inquiry of a Danish surgeon while walking through the wards of a French hospital gave a new impetus to the study and practice of the mode. M. Poncet, in an elaborate article in a late number of the *Lyons Medical*, says that there is no clinical record of rectal anæsthesia from the time of Simonin's employment of it to the present year.

In the March 30th, 1884, issue of the *Lyons Medical*, M. Daniel Molliere has lately brought the process of rectal etherization into prominence by means of an article in which he says, that while escorting a visiting Danish surgeon—Dr. Axel Iversen, of Copenhagen—through the wards of the Hotel-Dieu, which were under his charge, his guest asked him in which manner he administered ether—by inhalation, or by the rectum. This naturally aroused the curiosity of the hospital surgeon, and further conversation revealed the fact, that, according to Dr. Iversen's experience, the vapor of ether could be easily employed to produce insensibility by the latter method—the reverse of the manner in which it was usually given.

After the departure of his visitor, from whom he secured the details of the process, Dr. Molliere began his experiments. His first case was that of a young woman, aged twenty, upon whom he was to operate for the removal of a tumor of the parotid gland. In this case the ether itself was injected into the rectum by means of a patent atomizer. The anæsthetic was absorbed very slowly—it being ten minutes before the patient showed signs of incoherency, and could taste the ether in her mouth. As soon as the latter symptom occurred, a few drops of the same anæsthetic were placed upon a napkin and held to the patient's nose, when she at once fell into a deep sleep, and the required operation was performed without difficulty. Vomiting ensued as a sequel of the administration, the patient having partaken of soup just before the experiment, but beyond this no disturbance of the system was noted.

The next case in Dr. Molliere's practice was notable from an attempt being made to simply introduce the ethereal vapor into the body by way of the rectum, the free end of an india-rubber tube attached to a jar of ether being inserted from without, and the glass jar placed in a vessel containing water heated to a temperature of about 100° Fah. The ether rapidly boiling, delivered the vapor into the lower bowel and in five minutes the patient was almost prepared for the surgical knife, a few inhalations of pure ether rendering him ready for the operation. This being for the removal of a tumor from the antrum of Highmore, was the first face operation recorded under the new method, and its value may be seen at once, no anæsthetic napkin or cone being in the way of the operator's hand or instruments. The patient recovered easily from his insensibility without the usual accompaniment of nausea. Four more cases of the same form of ether vapor administration are reported by M. Molliere in the same paper, which were equally successful, one of the patients being a man who had led a most intemperate life. In none of these first cases reported was there any reference made to serious symptoms or unpleasant sequelæ.

In the May 3rd, 1884, issue of the *Medical Record*, a full report is given by Dr. Wm. T. Bull, of New York, of seventeen cases where etherization by the rectal method was employed in his service as surgeon to the New York and St. Luke's hospitals. In certain of his cases the patients were prepared for the administration by withholding food for several hours previously, and in one or two instances enemata were given to cleanse out the lower bowel. In most of the cases vomiting occurred, either during or directly after anæsthesia, and loose stools were common after withdrawal of the tube—twice with the accompaniment of blood. One of the patients, a boy of sixteen years, after twenty-five minutes etherization, was most seriously affected—the breathing became stertorous, the face cyanotic, the pulse feeble, and the body cold. It was only after active medicinal treatment and hot-air baths that consciousness gradually returned. Dr. Bull found that the distension of the bowel by the gas was not complained of as painful by the patients, nor as a

rule did it cause the straining which would be expected.

The vapor frequently escaped from the bowel by the side of the tube, so that it was difficult to judge of the amount really absorbed by the system, although the exact quantity of liquid ether used on each occasion was carefully noted, the amount being from two to six ounces—the average being about three ounces. The odor of ether was found upon the breath in from three to four minutes. The main objection Dr. Bull makes to this form of etherization is, that it is a serious irritant to the bowel, and he believes that in children or weak adults, this might prove dangerous, a view which as we shall see later has been unfortunately proven true. He does not agree with M. Molliere's statement that this method suppresses the period of excitation, and his experience showed him that it required, as a rule, a much longer time to produce complete insensibility, than is common with the usual "towel cone" style of administration of ether, and that in a number of cases the latter method had to be supplemented to the rectal mode before full anæsthesia was produced. He sums up his article upon the subject by saying that while this form of etherization can not be regarded by any means as a substitute for inhalation, yet it is decidedly a valuable addition to it.

In the same number of the journal¹ are reports of five cases in the Presbyterian and St. Francis hospitals, New York City, all in the service of Dr. Geo. F. Shrady, which seem to have been extremely satisfactory in all respects, no bloody discharges occurring, very little diarrhœa or vomiting, and the stage of excitement being comparatively limited, recovery after the anæsthesia being rapid and allied with no bad symptoms.

In the same journal² is also a communication from Dr. James B. Hunter, of New York, who reports six successful instances of the use of this method. He sums up his letter with the statement of his belief that it promises to effect a radical improvement in the method of administering ether.

¹*New York Medical Record*, May 3rd, 1884.

²*Op. cit.*, *vide supra*.

He found little or no period of excitement, and diarrhœa or vomiting in but one case.

A letter from Dr. Robert F. Weir, of New York, in the same issue¹ relates the particulars of two cases which are by no means as satisfactory as those before noted. In his first case, a boy aged fourteen years, insensibility could not be secured after fifteen minutes use of the ether per rectum, and the ordinary inhaling cone was finally resorted to. The second case was a robust child aged eight months, upon whom the usual operation for the cure of hare-lip was performed. The little patient came readily under the influence of the ether vapor in three minutes, less than two ounces of the anæsthetic being used. No struggling occurred, and the operation was concluded with but slight hæmorrhage. The child seemed a little depressed after the operation, but under the use of stimulants and dry heat, reaction was finally established. "During the night however, it had several large and bloody discharges, and died the following morning." Dr. Weir calls the attention of the profession to this danger of inflammation of the lower bowel, which he thinks is by no means unlikely to occur at any time.

The *Boston Medical and Surgical Journal*, May 8th, 1884, reports a meeting of the Boston Society for Medical Improvement, held on the evening of April 28th, in the course of which Dr. Abner Post gave a detailed account of his first three cases of etherization by this method. He seemed to be very favorably impressed by the results obtained in these cases, there having been no bloody discharges after the anæsthesia, but in a foot note in the same issue of the journal, he says that "further experience had led him to modify somewhat the favorable opinion" he had expressed at the meeting referred to; that insensibility had been occasionally so profound as to cause anxiety; and that he had since noted bloody passages more frequently than was desirable.

In the *Texas Courier-Record of Medicine*, June, 1884, Dr. E. N. Gray, of Houston, Texas, details the proceedings in one case where the rectal method was employed by him with marked good effect. He found the period of excitability

¹*Op. cit.*

short; there was very little vomiting, and he reports no diarrhœa after the anæsthesia, which latter was full and complete.

In this same journal, (*Texas Courier-Record of Medicine*), for August, 1884, a case is recorded by Dr. J. W. Carhart, of Lampasas, Texas, of a boy nine years old, where this method was adopted for the purpose of using an exploring needle in the deep muscles of the thigh. The lad supposed he was receiving an ordinary injection, and the home-made apparatus devised by the doctor worked admirably. The patient was profoundly anæsthetized in one minute, being but slightly excited, and suffering but little pain in the abdomen. Only half an ounce of ether was used, and no vomiting or diarrhœa occurred. The experiment was thoroughly successful in all respects.

Dr. D. K. Shute, of Washington, D. C., in a letter published in the *Medical Record*, June 7, 1884, recites his experience in two cases of rectal etherization, the first of which presents no special point of interest, being, like many other instances already related, free from dangerous symptoms and unpleasant sequelæ. The other patient had a considerable period of excitement during recovery from the effects of the ether, singing, talking loudly, etc. This second case is peculiarly interesting in some of its details, being one of the best arguments in favor of this method yet presented. The patient, a very old negro, was in a condition which naturally made the operator hesitate about anæsthetizing him, being possessed of a weak, rapid, and irregular fatty heart. After beginning the administration of ether by this method, the usual symptoms followed—three-minute stage of excitement, full flow of saliva, slight distention of abdomen, small amount of vomiting, "sore belly," and slight acceleration of respiration. The important point was this: As stated before, the heart action was very bad, but as the influence of the ether per rectum became manifest, "the pulse approached a normal basis, became quite regular, slow, full, and strong, and maintained this condition throughout the period of anæsthesia."

The *Medical News*, July 19, 1884, contains an account of one case of rectal etherization, which occurred in the hos-

pital service of Dr. Wm. Pierson, of Orange, N. J. During the operation "the patient answered questions in an amazingly rational manner," but stated afterward that he had felt no pain from the amputation of the finger which had been performed. This case was one which was followed by very severe and distressing symptoms. Several hours after the operation he began complaining of violent colicky pains in the abdomen, and immediately commenced vomiting, throwing up the food which he had just previously partaken of, accompanied by blood; and a large bloody stool was passed. The pain which then began increased to a very great extent, and frequent bloody evacuations by the mouth and rectum ensued, until finally all that passed from both sources consisted of pure blood—the patient naturally passing into a state of great prostration. These serious symptoms continued for about thirty-six hours after the ether administration, his condition forcibly suggesting a fatal result, until the system began to rally, forty-eight hours after the operation. It was not until the fourth day after the etherization that recovery seemed probable. Everything that medical attention and careful nursing could do to procure recovery, or even an amelioration of the dangerous symptoms, was faithfully tried, and probably this case would have been recorded as one of death from rectal etherization had the patient not been situated where all means could be employed to save his life. The patient was a man of excellent physique, and there was no reason to suppose that anything but the ether vapor per rectum brought about the dangerous condition described.

In the *Maryland Medical Journal* July 19, 1884, is a report by Dr. John S. Miller, of Philadelphia, read before the Philadelphia County Medical Society. June 11, 1884, of four cases of etherization by the rectum, the last one being an experimental one upon a medical friend. No vomiting as a result of the process occurred in any instance, and diarrhoea in but one. In two of these cases an over-boiling of the ether, producing too great an amount of the vapor at a time, caused considerable burning and tenesmus, but singular to relate, even these patients escaped without bloody stools following.

Dr. Frank Foster, in the *New York Medical Journal*, May 24, 1884, mentions a fatal case, that of a woman in ordinary health, to whom the ether was given for a minor operation, and in whom the autopsy showed a condition of acute ulceration not only of the whole large intestine, but also of the lower portion of the small intestine.

To these cases I have two to add, or rather I should say only one, as the first patient whom I attempted to anæsthetize by this method, for some reason did not come under the influence of the ether. I was called upon to amputate the crushed finger of a colored boy about fourteen years old, and I endeavored to improvise an apparatus by means of a two-foot rubber tube with rectal metal tip attached, a plain six-ounce bottle half-filled with ether with a short metallic tube running through the cork, and a tin-pail of hot water. I fastened the plain end of the rubber hose firmly to the metal tube in the cork, cemented the cork into the neck of the bottle of ether, and placed the latter in the pail of water at a temperature of about 140° Fah. After properly inserting the rectal tube I awaited developments, which did not exactly proceed as I had confidently expected. After about fifteen minutes of waiting, the nearest the boy came to even a condition of excitement, was to laugh hysterically several times, and say that he felt "funny." I could hardly continue him in his feeling of enjoyment much longer as the ether was about evaporated, and I was compelled to employ chloroform by inhalation, which naturally produced a condition of insensibility in even quicker time than is usual. Within a very few minutes after beginning the rectal process I could smell the ether on his breath, but as I could smell it anywhere in the room and taste it in my own mouth, I could hardly look upon that as in any way a diagnostic sign. No doubt most of the vapor escaped by the side of the rectal tube and perhaps also through portions of the cork. There was very slight swelling of the abdomen. The only mention of an instance similar to this which I have been able to find, is where Dr. Frank Foster¹ notes a case in which "the rectal administration failed utterly, although

¹ Editorial *New York Medical Journal*, May 24th, 1884.

the trial was prolonged for as much as twenty minutes, at the end of which time the patient was as wide awake as at the start, and the attempt had to be abandoned."

My second case was that of a negro woman, upon whom I had several times opened recurring deep abscesses due to an inherited blood taint. Up to this last occasion I had always given her chloroform when I used the knife, as she was one of the nervous and hysterical kind that bears pain badly, and upon my explaining the method of rectal anæsthesia she consented to the experiment. I used very much the same apparatus as before, it being of my own manufacture. Having had time to get the bowel thoroughly cleaned out previously by enema, I found very little difficulty in producing a condition of insensibility amply sufficient for my purpose. Although it was necessary in this case to secure a very short period of anæsthesia so far as the operation was concerned, yet I purposely prolonged the administration of the ether as an experiment, keeping the patient in an unconscious state for at least fifteen minutes, and I have no doubt but that the same condition might have been secured for at least half an hour. There was but little vomiting, which occurred just before insensibility was induced. There was some swelling of the abdomen, and a small loose passage from the bowels was noted about an hour after full sensibility returned, but there was no pain complained of at any time, and not the slightest sign of the bloody dysenteric evacuations which are so common after this procedure. In short, it was a most successful case of etherization by the rectum.¹

I have now presented to you a short account of the fifty instances of anæsthesia by the rectal method which I have been able to find fully detailed in current medical literature up to September 1st of this year, forty-four being in the practice of our American surgeons, there probably having been a few other cases which have not been published, or

¹ A number of cases have also been reported by French surgeons this year, and carefully written articles upon this method have been presented in the *Journal de Médecine de Paris* and *Gazette des Hôpitaux*, as well as in different issues of the *Lyons Médicale*. In a late number of *Le Progrès Médical*, M. Dubois gives an account of his attempts to anæsthetize dogs by the use of chloroform vapor per rectum. He states that although considerable abdominal tympanism was developed no signs of anæsthesia presented themselves.

which being published have escaped my notice. Of this number of trials of the new method, death has resulted in two cases. Is not four per cent. of fatal results enough, if not to condemn, at least certainly to make us doubt the great value of, this so-called novelty?

And yet there is a class of surgical cases in which, properly employed, rectal anæsthesia has great advantages over inhalation.

How many members of this Society have not only been thoroughly annoyed, but their work performed with comparative dissatisfaction, when, in operations upon and about the face they have been compelled to relinquish all operative procedure for a time, while the assistant again produced a condition of anæsthesia by an inhalant!

Is there ever an operator who likes to stop in the course of his operation while the patient is being for the second, or perhaps the third time, placed or continued in a state of insensibility? There have been instances in operating for the cure of hare-lip, cleft palate, epithelial cancer, etc., where, for the purpose of concluding the operation, it has been necessary to perform tracheotomy, and to administer the anæsthetic vapor through the tracheal tube.¹ This class of cases constitutes the only range of adaptability which the "new" method really has—the argument that it is more economical, as less ether is used than by inhalation, being puerile, the question of a few cents' expense requiring little consideration in the face of a necessary surgical operation. To be sure, some writers have laid great stress upon the fact, that by this method the pulmonary channel is kept clear, and the danger of laryngeal irritation and of asphyxia² is reduced to a minimum; but this is more than counterbalanced by the fact that when you are getting too much of an anæsthetic vapor into a patient's lungs you can stop the inhalation, and if necessary resort to artificial respiration, but if you have gotten too much ether vapor into the bowel of a

¹The *Medical Age*, July 10, 1884.

²One would naturally suppose that there would be no "laryngeal irritation" at all when ether is given by the rectum, but the fact is that there is always an extra secretion from the laryngeal and bronchial mucous membrane during this process, often slight and occasionally considerable in quantity.

patient it is not easy to remove it quickly, even by massage.

The question as to whether the period of excitement is perceptibly less during the earlier stage by this method, than when ether is given by inhalation, is certainly, according to the cases recorded, considerably in doubt, some operators believing it to be very much lessened—in some instances notably absent; while others declare that there is really little or no difference in the length of the period. The writer believes that if surgeons who use ether by inhalation would follow the advice of Prof. Austin Flint, Jr., as to the manner of giving it, there would be little or no trouble from this source. He was in the habit of telling the Class, when administering ether to dogs for further experimental purposes, that the anæsthetic should be employed on the human as on the canine—there should be no admixture of the vapor with atmospheric air, until all chance of this period was past.

There is no doubt but that the time required for full anæsthesia is longer, by what is called by one journal the “retroversed method,”¹ but that is of little consequence—while on the other hand, as a rule, the vomiting is less than after inhalation, and it is claimed by most writers on the subject that patients recover more quickly from the state of insensibility—a statement not borne out by my own small experience.

Now, in few words, what are the difficulties in the way of rectal etherization attaining anything but an ephemeral popularity, save in selected cases?

One of the first things to be remembered is, that very few patients, outside of the comparative tyranny of a hospital, are willing to allow a full exposure of the abdomen, which is absolutely essential to a proper administration by this method, even if the rectal tube is inserted in its proper place under cover.

The method should never be adopted without a thorough cleansing of the lower bowels by means of enemata, and this necessity effectually precludes its employment in cases of sudden emergency, accidents, etc.

The danger of severe, if not fatal bloody diarrhœa, or dysenteric evacuation, ensuing upon this form of adminis-

¹*Cincinnati Lancet and Clinic*, August 2, 1884.

tration, is without doubt very great, for although some operators have not yet met with it, a sufficient number of instances have been reported to show that it may be called the rule rather than the exception.

We must remember that although we can measure the amount of pure ether used we *can not* say as to the percentage in the circulatory system. We can tell exactly how much of the anæsthetic we are employing, but we are in a position where we cannot even guess as to the extent of the absorption of the vapor by the bowels from time to time, the process being at best both irregular and uncertain—it may be going on slowly or its progress may be exceedingly rapid—we have nothing but the patient's symptoms to gauge it by—and they may often be held in abeyance for a few serious minutes or even seconds. Neither do we know how much or how little obstruction there may be high up in the colon from feculent matter, even after apparent full cleansing of the bowel.

Yet as the method is comparatively new, and we are all desirous of trying a novelty if not positively dangerous, a great many experimental cases of rectal etherization will undoubtedly be tried during the next few months, more especially if no more fatal instances are reported, and perhaps a few hints concerning its employment gathered from a slight personal experience and careful reading, will be acceptable.

In the first place, great care should be taken to see that the connecting joints of the tube are perfect, as no doubt some of the instances of prolonged administration without the full desired effect, might be found due to such a cause.

The rubber tubing must not be too short or too long, as in the former case the boiling ether might be forced into the rectum, with grave results; and in the latter case an opportunity is afforded for a condensation of the vapor, and in consequence liquid ether will be injected into the bowel. It seems to be the general opinion that two feet is about the proper length of the elastic tube.

It is obvious that the water bath should be kept at about the same temperature during the procedure, so that the patient

may receive the vapor regularly and definitely—120° to 140° Fah. being most frequently employed. If this is not guarded carefully, and closely watched, a sudden distention of the abdomen from the entrance of too much gas may at any time occur, and, pressure upon the diaphragm ensuing, serious dyspnœa will be produced; or, on the contrary, the lowered temperature of the water will render the attempt at vaporization of the liquid futile.

Two ounces of ether will usually be sufficient to secure a condition of insensibility, but much larger quantities are sometimes required with apparently no more serious result. As soon as a state of complete anæsthesia is observed the tube should be at once removed, to be replaced if necessary in operations requiring a considerable period of time.

The nates should be held together as closely as possible by an attendant, to prevent the escape of any vapor around the rectal tube. Neglect to do this has caused an unnecessary prolongation of the ether administration.

The possibility, and we might say probability, of sudden lively peristalsis occurring at any time during the administering of the ether, must be considered by the operator, as the unpleasantness of an unexpected loose fecal passage in the middle of an operation—or, as has been the case in some instances, even before the tube has been removed¹—will suggest itself at once.

The surgeon must expect to meet with cases where the rectal administration will proceed admirably up to the point immediately preceding complete insensibility. In such instances a very few whiffs of the vapor through the pulmonary channels will be amply sufficient to produce the desired effect. It is probably best that on none but robust adults should this rectal method be employed, save when necessity compels—as in face operations, etc.—as already mentioned; and even in such cases until improvement in this form of administration has so far been made as to render it less liable to produce unpleasant and serious results, the general practitioner had best not experiment too much with it unless his

¹*Maryland Medical Journal*, July 19th, 1884.

reputation is so well assured that he can afford to take some risk.

In conclusion, I may safely say that we of the South will probably never find any form of anæsthesia superior or even equal to that produced by chloroform inhalation. Despite the unfavorable accounts given of the employment of the chloroform method in other sections, we still look upon it as sure, and as safe as any other mode of inducing insensibility for the purpose of operation, and until we are convinced to the contrary by local statistics, we shall continue to use it. With a careful administration of diffusible stimulants or hypodermic morphia injections before the inhalation of chloroform, we have, so far, found nothing to take its place in general operative procedure.

Thanking you for your kind and patient attention during this short account of the newly revived method of anæsthesia, I leave the process in your hands, believing, as I have said, that for certain operations about the face and mouth there is a favorable future for rectal etherization.

ART. II.—New and Valuable Remedies (Continued)—Reports on Cocculus Indicus, Hydrobromic Acid, Quinia, Hydrobromate, Amyl Nitrite, Monobromide of Camphor, Potassium Bromide, Jamaica Dogwood and Ustilago Maidis, etc.
By J. J. CALDWELL, M. D., Baltimore, Md.

COCCULUS INDICUS is the Indian fishberry, the seed of a climbing plant of India. When dried, the berry is the size of a large marrow-fat pea, of a dark brown color, and having a bitter kernel within. The active properties reside in a white substance called "*pirotoxin*," which was first noticed by Boullay in 1819. This same principle has also received the name of "*pirotoxic acid*." It is soluble in ether to a very slight degree, but dissolves readily enough in alkaline solutions. It has much the same reaction as grape sugar, causing the precipitation of the oxide of copper from solutions of that metal. It is useful in excessive night-sweats of debility from phthisis and following typhoid fever.

The effects of the fishberry in medicinal doses in man are

those of a cerebro-spinal narcotic, capable in large doses of producing death. It is rarely used internally, but rather in the forms of decoction and of ointment, for the purpose of destroying lice and other parasites, and for the cure of tinea and porrigo of the scalp.

The fishberry is sold in commerce to brewers, who use it to prevent the secondary fermentation of malt liquors—quassia being added to impart the intense bitterness for which that wood is remarkable. The cocculus is useful in *materia medica*, while it is hardly officinal. It sometimes happens that you will find obstinate eruptions which will arouse your suspicions, even where you know your man. One case may be cited of a gentleman who consulted a druggist for a breaking out which had continued for several weeks, and which was attended by great itching, causing much loss of rest. The druggist, in the wisdom of his ignorance, gave him a yellow wash. In a couple of weeks the party was terribly salivated and consulted a physician. The party had years before suffered from constitutional syphilis, but at the date of consultation there were no signs on which to base a diagnosis of that affection, and the physician declined to treat him for it. He, however, questioned him closely as to where he had slept of late, or who had slept with him. He remembered that about the time the eruption first appeared a friend from another city had shared his bed for a week. The salivation was treated with the usual remedies, the doctor telling him to examine his blankets, and especially his flannel shirt around the neck and under the arms. On his next visit to the office he informed the doctor that he had found vermin on his shirt as well as on the blankets. After changing the blankets and clothing, and on the use of the ointment of *cocculus indicus*, he was no more troubled with his unaccountable eruption and itching. That gentleman was sure he had his old dragon cropping out afresh, and no doubt he paid a good price to the druggist for the privilege of being salivated.

The ointment is prepared by rubbing up the powdered fishberry with about five times its weight of lard. Hot lard extracts its strength more effectually than does the cold

grease. The unguentum cocculi answers as well for the destruction of the crab-louse as for that of the common body louse. It is a good plan to rub up one-third part of the blue mercurial ointment with two-thirds of the ointment of the fishberry so as to render the application more effectual, there being little or no danger from the combination in this strength producing any ptyalism. The gentleman just referred to slept in a basement room, whose rear was on a level with the ground, and where the sunlight never entered.

It is well known that the larkspur (or delphinium) leaves stewed in lard were useful in ridding negro children of head lice. In India the berries are used to stupefy fish so that they may be taken in quantities. Fish thus intoxicated float on the surface, and can be taken up by the hand. The flesh of the fish is not poisonous. In England the use of the berry for this purpose is forbidden by law. *Mullein seeds* are said to poison fish also, just as the China berry stupefies birds, which eagerly feed upon them.

A strong tincture of the *cocculus indicus* applied to the scalp of a six-year-old child produced death, attended with convulsions. Planat has praised this agent as having effected cures in sixteen cases of epilepsy, beginning with two drops of a saturated tincture, and increasing the dose each day until thirty drops were taken, but more recent research has not confirmed its efficacy in this disease.

HYDROBROMIC ACID is useful as preventing the bugging so apt to follow the use of large doses or the prolonged administration of quinine, and patients may be assured of its decidedly preventive power in this respect. It can be the more readily given with the quinine than can the bromides of sodium or of potassium in solution, as they are apt to throw down the quinia from its state of solution. With the view of lessening this tendency to cinchonism, we can thus add 20 to 40 drops of the hydrobromic acid to the quinia or cinchonidia in a solution with some aromatic water, or in syrup of orange peel, when it rarely offends the stomach. In whooping cough the hydrobromic acid is really efficacious, acting like the syrup of the hydriadic acid in asthma, but less permanently. Strange to state, the hydrobromic acid has not

answered the purposes of the bromides in epilepsy, appearing even in the experience of some physicians to have aggravated the attacks. The combination of quinia with the acid under consideration of quinia forms the hydrobromate of quinine.

QUINIA HYDROBROMATE.—The dose of this solution is thirty to forty drops in water, fifteen drops of the solution being about equal to four grains of the salt, and this solution is used hypodermically. The combined force of the bromides of potassium, sodium and ammonium given in some good tonic tincture answers a fine purpose, with or without the addition of Fowler's solution. The chief objection, however, to the ammonium bromide is its very unpleasant taste, which as a medicine to be kept up indefinitely in epilepsy is much against it. This bromide containing more of the bromine, cannot be as freely given as the potassium bromide; so that a good combination is formed of fifteen grains of potassium bromide with three grains of the bromide ammonium dissolved, for adults, in \mathfrak{ss} of compound infusion of chinchona bark. In pertussis it has exerted a fine effect in benumbing the reflex irritability.

AMYL NITRITE.—Nitrite of amyl has been found to arrest dilatation of the walls of the arterial capillaries by reducing pressure, and for this reason is regarded as antagonistic to chloroform, which, like ergot, contracts the capillary walls. It is rapidly absorbed by the tissues generally, and produces its unconsciousness not until all its other effects are fully developed. Under its action the physiological change from arterial to venous blood fails to occur, and the blood remains of a brownish color in both veins and arteries. In full doses it lessens the bodily heat greatly, and at first reduces arterial pressure so that primarily the heart's action is accelerated, but if the drug is pushed, the pulse rate becomes lowered. Amyl nitrite is very variable in its action, a few drops speedily affecting some persons, while others can inhale twenty to forty drops without injury. Its power to dilate the capillaries suggested its employment in angina pectoris, in which a few drops will serve to lessen the paroxysm. In neuralgia of the fifth pair it affords prompt relief

in some cases, and in asthma it is occasionally very prompt. Cases of traumatic tetanus have been known to recover under its use, and in cases of frogs under the toxic influence of strychnia, death was prevented by the use of the nitrite of amyl. In puerperal eclampsia, it has been found to control the spasms. In epilepsy, it has not given favorable results. In chloroform poisoning, the amyl has been injected hypodermically, but the usual plan is to give it by inhaling a few drops on a handkerchief or sponge. Globules or tears of glass containing four or five drops may be carried, and one of these is broken in a folded handkerchief and snuffed just as the patient feels the epileptoid seizure coming on. In valvular heart disease its use would be improper.

MONOBROMIDE OF CAMPHOR.—Monobromide of camphor lessens the heart beats and contracts the blood vessels of ears and eye-lids, and no doubt of the brain. It is hypnotic, acting directly on the brain. It has been followed by good in epilepsy, and has controled the excitement of delirium tremens.

POTASSIUM BROMIDE.—This is regarded as useful in many convulsions, and especially in epilepsy do we obtain the very best results if we succeed in placing the patient fully under its influence—even to an occasional cure of the disease, and it is chiefly in this form where the attack is attended by violent struggles, followed by the condition of coma. In the lighter attacks the drug shows but little effect. In the convulsions of children, depending on meningeal irritation, it is very useful. Its efficacy appears to be due to its power of lessening spasmodic contraction of the small blood vessels, which give the special vascular supply to the portion of brain whose function is deranged. Over the sympathetic system generally it is thought to exert a decidedly soothing influence. From its moderate action in promoting repose and sleep, we may infer that the vessels of the brain are contracted to the extent of causing anæmia of brain. Over the organs of generation, the salt has decided action in lessening their excitability, and even in very large doses suspending their power for the time, in this way acting like camphor, whose emasculating effect has given rise to the well known distich,

"Camphora per nares
Castrat odore mares."

To promote refreshing sleep it has to be given in free doses, except in such as are readily impressed by sedatives generally. One great objection to its continued use is that it is apt to produce acne, and a case is reported where it had this effect on a nursing infant, whose mother was taking the salt. To be effectual in epilepsy it should be given in thirty to sixty grain doses, generally increasing the dose, with now and then an intermission of a few days. Children generally stand it well, and it may be given to them in syrup of orange peel. Sulphate zinc in gradually increasing doses has been of great use in epilepsy.

JAMAICA DOGWOOD.—This substitute for opium, from the West Indies, I have found very useful administered in half drachm doses, in the treatment of chorea of children, noticeably, in one case, a boy aged twelve years, well developed, hearty and rosy. He had continual twitching of face and hands with great impediment of speech, and continual restlessness by day, though at night he slept very quietly. After a prolonged treatment by his physician, who resided in a village about twenty miles distant from Baltimore, who had administered various remedies with poor results—he referred him to me in consultation. I placed him upon *Piscidia erythrina*, or Jamaica dogwood, with immediate good results, in half drachm doses, continued for two months. He is now so much improved as to have perfect control over speech and motion. This drug has proved useful in many like cases under my care at the Orphan Home of our city, and so far I fail to see any unpleasant manifestations from its administration. I have also found it very useful in the relief of neuralgia and hysteria.

As a substitute for the morphia habit, I make the following extract from a letter of one of my patients:

"*Dear Doctor*,—I increased the dose of morphia until I was taking one drachm per day; then I decreased the dose gradually without stopping my work until I now take but one grain a day. Half an ounce of dogwood taken every four hours took the place of one grain of morphia, giving me a night's rest."

My patient will continue the dogwood, and I will report his progress from time to time.

FLUID EXTRACT USTILAGO MAIDIS—(*Corn Ergot*).—This remedy I find a very good substitute for the ergot of rye in the treatment of uterine flow or hæmorrhages; but recently I have used it in spinal irritation due to hyperæmia.

A lady aged forty, of robust form, endured a severe shock to the spine some years ago. Since that time she has suffered spinal irritation, frequent attacks of neuralgia in various parts of the body, due to the hyperæmic condition of the cord. Her treatment so far has only succeeded in mitigating the symptoms. The best results in her case have been obtained from the administration of *ustilago maidis* in half teaspoonful doses—morning and evening. I have been able to hold the neuralgic symptoms in abeyance by this remedy.

CEREUS BONPLANDII.—Says Dr. Kunze, this drug stands unrivaled in the influence it exerts in controlling functional diseases of the heart. It also controls the disturbances due to organic lesions. My experience fully sustains Dr. K's statement. I have also found it very valuable in nervous cough, gastralgia, and in irritability of the bladder. It acts promptly to relieve hysterical polyuria, and indeed in hysterical troubles, chorea and other sympathetic nervous disorders.

COCA LEAVES (U. S. P.)—A valuable remedy in cases of nervous exhaustion, mental depression, and cure for opium habit. When taken in teaspoonful doses in draughts of hot water it has proven a most valuable remedy for the treatment of alcoholism with the insatiate thirst of an inebriate. In brain and spinal exhaustion it far surpasses alcohol as a restorer.

EUPHORBIA PILULIFERA.—A speedy and sure relief for spasmodic asthma, and valuable in whooping cough and catarrh, and in fact I have never used a more successful remedy in the acute stages of catarrh troubles. This remedy is only to be well known to be heartily welcomed by the profession.

KAVA KAVA.—An efficient remedy for gonorrhœa, gleet, rheumatism and gout. This remedy should be more

thoroughly investigated, as it contains some valuable qualities in the treatment of the above diseases, not found in iodide of potash and colchicum. Its immediate effect to relieve the painful symptoms are highly to be commended.

LILY OF THE VALLEY FLOWERS.—A cardiac tonic increasing the strength of the heart beat. Acts much like the *cereus bonplandii* and *digitalis*. It has proven highly remedial when both of the above named heart tonics have failed.

CHLOR-ANODYNE.—This anodyne is a most useful, safe and agreeable combination, relieving pain and affording repose when other opiates are intolerant.

NITRITE AMYL PEARLS.—This is a very safe and ready preparation where angina pectoris is to be combated by immediate treatment—the pearls are the remedy, *par excellence*—also the most ready remedy in the relief of chloroform toxemia.

CAULOCOREA.—A valuable remedy for loss of digestion, wasting of flesh, &c. But its principal virtues are manifested upon the uterus through the sacral plexus. The formula is given in a foot-note,* and its components commented upon by practitioners of authority.

New Hypodermic Syringe.—In consultation with Dr. N., one day, of N——, it was necessary, we thought, to give a hypodermic injection.

Not having my syringe with me, he volunteered to go to his office and bring his own.

He returned with one of those old-fashioned, straight zinc rectal syringes that had been made at least forty years. He said this was the one he always used.—*Dr. Loppe, Quacks and Quackery in Indiana, Trans. Ind. State Med. Soc., 1883.*

* *Formula.*—R. Caulophyllum thalictroides.

Viburnum { opulus.
 { prunifolium.
Althis farinosa.
Dioscorea villosa.
Mitchella repens. aa

Mode of Preparation.—Pack the ingredients in a displaced vessel, the lower end of which is connected with a receiver; the top is closed with a well luted cover. Through an opening in this the vapor of alcohol is driven down through the ingredients. By this process we procure a concentrated fluid extract upon scientific principles, containing all the volatile and medicinal elements of the materials separated from the extraneous and inert matter. It is then converted into an elegant elixir, whereby the repugnant taste of the medicine is obscured, going all ready for dispensing.

ART. III.—Phenic Acid Hypodermically for Malarial Fever—
Experimental Observations. By WM. R. PRYOR, M. D., Assistant to Chair of Surgery, N. Y. Polyclinic, etc., New York, N. Y.

CASE I. QUOTIDIAN.—Christian H.; male; æt. 21 years; German; varnisher by occupation.

April 3d.—For the past four weeks he has had a daily chill, followed by fever and sweating. The paroxysms at first recurred regularly at 4 P. M., but for the past few days they have come on irregularly in the afternoon. In the interval between each sweat and the next chill, the patient is free from fever. In the beginning of his illness the paroxysms were much more severe than they have been of late. He is a well nourished, robust man, though somewhat pale and anæmic. Previous to four weeks ago he had always enjoyed excellent health, with the exception of an attack of typhoid fever some years ago; liver and spleen somewhat enlarged. All the other viscera apparently normal.

1 P. M.—Had a very violent chill, which lasted one hour, after which his temperature was $103\frac{1}{4}^{\circ}$. During the chill he took by the mouth amyl nitrite *mij*, but it did not break the chill.

April 4th, 9 A. M.—Temperature 99° .

9:30 A. M.—Commenced using the liquor acid. phenic, glacial (Déclat) hypodermically.

12:40 P. M.—He began to have a chill, which lasted forty minutes.

1:20 P. M.—Temperature $105\frac{1}{2}^{\circ}$.

5:20 P. M.—Temperature $104\frac{1}{4}^{\circ}$.

April 5th, 8 A. M.—Temperature 99° .

9:30 A. M.—So far patient has taken m. 270 of Déclat's solution of nascent phenic acid. He complains bitterly of the pain which the puncture caused.

12:30 P. M.—Temperature $99\frac{3}{4}^{\circ}$.

12:40 P. M.—Chill lasting forty minutes, but not so severe as the last one.

4:45 P. M.—Temperature $103\frac{1}{4}^{\circ}$.

April 6th, 8 A. M.—Temperature 100° .

10 A. M.—Up to the present time he has taken liquor acid. phenic, m. 1080 hypodermically.

10:45 A. M.—Chill for one hour. This chill was much more severe than any he has had since I have seen him. During it the patient's face was very much cyanosed; surface cold and cutis anserina very well marked; respirations

catching and shallow; and the superficial veins dark and distinct. During the chill I gave him whiskey ℥ iss and amyl nitrite m. iv, but with little effect upon the chill.

11:10 A. M.—During chill, temperature 104° .

11:40 A. M.—During chill, temperature $106\frac{2}{3}^{\circ}$.

11:45 A. M.—After chill, temperature $104\frac{3}{4}^{\circ}$. An analysis of his urine shows a slight trace of albumen and but an exceedingly small quantity of the sulphates, the barium chloride test producing a scarcely perceptible cloudiness. It was not deemed wise to push the phenic acid further, so it was stopped at 5 P. M. Altogether he has received m. 1440 of the two per cent. solution of phenic acid.

7 P. M.—Gave him quiniæ sulph., gr. xx.

April 7th, 6 A. M.—Quiniæ sulph., gr. xx.

7 A. M.—Temperature $98\frac{1}{2}^{\circ}$.

12 M.—Quiniæ sulph., gr. xx.

5 P. M.—Temperature $98\frac{1}{2}^{\circ}$. Patient has had no chill to-day. He is thoroughly cinchonized.

April 8th.—Ordered quiniæ sulph., gr x, *ter in die*; iron. Temperature never again rose, and he had no chill up to the 13th, when I saw him last. Cured.

CASE II. QUOTIDIAN.—John P.; æt. 25; Irish; laborer.

May 3d.—The patient lived for some time in the South, and there suffered from chagres fever. During the last thirteen months he has had frequent attacks of malarial fever. The present illness began on April 30th, with a severe chill, followed by fever and sweating, and accompanied by vomiting, severe headache and backache. These seizures have since been repeated daily. Liver and spleen enlarged and sensitive to pressure. Here, certainly, I had a good case for Déclat's treatment—an old, chronic case, with a recent very acute manifestation of the poison.

May 4th, 9:10 A. M.—Temperature 102° ; began to have a chill, which lasted thirty minutes. Vomited slightly.

9:40 A. M.—Temperature $103\frac{1}{2}^{\circ}$.

11 A. M.—Commenced using phenic acid.

5 P. M.—Temperature 100° ; sweating slightly.

May 5th, 8:30 A. M.—Chill began and lasted forty minutes.

8:40 A. M.—Temperature $101\frac{1}{2}^{\circ}$.

9:15 A. M.—Temperature $104\frac{4}{5}^{\circ}$.

11 A. M.—So far patient has received phenic acid (two per cent. solution) m. 720, hypodermically.

May 6th, 8:45 A. M.—Chill began and lasted thirty-five minutes.

9 A. M.—Temperature 101° . Vomited.

9:20 A. M.—(Immediately after chill.) Temperature $104\frac{1}{2}^{\circ}$.

11 A. M.—Thus far patient has received phenic acid m. 1440, hypodermically.

5 P. M.—Temperature 100° .

May 7th, 9:15 A. M.—Chill began and lasted twenty minutes.

9:35 A. M.—Temperature $102\frac{1}{5}^{\circ}$ (just after chill).

5 P. M.—Temperature $99\frac{1}{2}^{\circ}$.

Up to 11 A. M. he had received acid, phenic, m. 2160, hypodermically.

This chill was much less severe than any of the preceding ones. The man's abdomen is one mass of hard and painful lumps. He complains bitterly of the hypodermics, and it is with great difficulty that I can get him to consent to their use, although he thinks he is getting better. The spleen is not quite so large as when he was first seen.

May 8th, 8 A. M.—Temperature $98\frac{3}{5}^{\circ}$.

5 P. M.—Temperature $100\frac{1}{2}^{\circ}$. No chill to-day.

Up to 11 A. M. he had received phenic acid m. 2880, hypodermically.

May 9th, 8 A. M.—Temperature $99\frac{3}{5}^{\circ}$.

11 A. M.—Total amount phenic acid taken hypodermically, m. 3600.

5 P. M.—Temperature 99° . No chill to-day.

May 10th.—Patient refuses to take any more hypodermics, remarking that "the cure is worse than the disease." To-day he sat up for the first time. The sulphates in the urine are decreased about two-thirds, but the urine is otherwise normal.

Up to 10 A. M. he had taken 4230 minims of two per cent. solution of phenic acid. Temperature normal all day.

May 11th.—Stimulants and tonics. Temperature normal.

May 12th.—General condition somewhat improved, but he is still very weak and anæmic. Temperature normal.

May 13th, 9 A. M.—Chill lasting an hour and a-half.

10:30 A. M.—Temperature $104\frac{1}{2}^{\circ}$; refused to go back to the hypodermics of phenic acid.

12 M.—Quiniæ sulph., gr. xx.

7 P. M.—Quiniæ sulph., gr. xx.

May 14th, 7 A. M.—Quiniæ sulph., gr. xx. Thoroughly cinchonized. No chill to-day. Temperature normal.

May 15th.—Ordered quiniæ sulph., gr. x, *ter in die*. Still deeply under the influence of the quinia. No chill and no fever to-day.

May 22d.—All treatment stopped; appetite excellent; no rise of temperature above 99° since the 14th. Cured.

CASE III.—TERTIAN.—George H.; æt. 31; Irish; porter.

August 27th.—Patient states that he never had a similar illness before.

Ten days ago he began to suffer from headache, nausea and vomiting and diarrhœa. The gastric disturbance continued for three or four days, and then subsided, but the diarrhœa still persists. A week ago he had a violent chill, followed by fever, and this by sweating, and since that time he has had a chill every other day. One is due this evening. Spleen enlarged and sensitive to pressure.

3 P. M.—Chill. Temperature in chill $105\frac{1}{2}^{\circ}$.

6 P. M.—Temperature 102° .

At 3 P. M. $\mathfrak{5j}$ quiniæ oleat. was rubbed into his arm-pit; ordered bismuth and morphia for the diarrhœa.

8 P. M.— $\mathfrak{5j}$ quiniæ oleat., as before.

August 28th.—Temperature normal all day.

August 29th, 8 A. M.—Temperature 99° .

10 A. M.—Chill, with temperature $105\frac{3}{4}^{\circ}$. Quiniæ oleat., $\mathfrak{5j}$, inuncted.

12 M.—Temperature 104° .

6 P. M.—Temperature $98\frac{1}{2}^{\circ}$.

August 30th.—No chill to-day; temperature normal all day; diarrhœa has ceased; ordered phenic acid treatment.

August 31st, 8 A. M.—In the past twenty-four hours he has received syr. acidi phenic (Déclat), $\mathfrak{f}\mathfrak{3}\mathfrak{i}\mathfrak{s}\mathfrak{s}$, by mouth, and liq. acidi phenici glacialis (Déclat, two per cent.), m. 720, hypodermically; had a chill this morning, with a temperature of 104° .

5 P. M.—Temperature 98° ; bismuth and morphia stopped.

September 1st, 8 A. M.—Up to this hour he has taken syr. phenic acid $\mathfrak{5}\mathfrak{i}\mathfrak{j}$, liq. acid. phenic, m. 1440, hypodermically. No chill to-day, and no fever.

September 2d.—Tongue clean; appetite is better; chill this morning; temperature, after chill, 104° ; chill occurred later than yesterday.

5 P. M.—Temperature 101° . Up to 8 A. M. he had received syr. acid. phenic., $\mathfrak{3}\mathfrak{i}\mathfrak{v}\mathfrak{s}\mathfrak{s}$, liq. acid. phenic., m. 2160, hypodermically.

September 3d.—No chill to-day; temperature normal; phenic acid treatment as before.

September 4th.—Chill this morning; temperature 102° .

5 P. M.—Temperature 103° ; abdomen very sore from the hypodermics, and at 8 P. M. he refused to take any more; so the phenic acid was stopped entirely. Altogether he has received syr. acid. phenic., $\mathfrak{3}\mathfrak{i}\mathfrak{v}\mathfrak{i}\mathfrak{s}\mathfrak{s}$, and liq. acid phenic.,

glacial, m. 3240, hypodermically. This large quantity was given in m. 90 doses every three hours with one puncture of the needle. They were all given into the cellular tissue of the abdomen, given warm, and the lump resulting from each hypodermic was painted with tr. iodini.

September 5th.—No chill; temperature normal.

September 6th.—No chill to-day up to 9 A. M. But, fearing lest he should have one, I ordered quiniæ sulph., gr. x, *ter in die*, every day until the 13th.

September 13th.—No chill since the 4th. Cured.

Remarks.—Thus we see that in Case No. I the patient was not benefited by the phenic acid. On the contrary, he got worse under its use. When he was first seen, his urine was examined and found normal. He seemed to be peculiarly susceptible to the action of the phenic acid. It was certainly seriously affecting his kidneys. In Case No. II it certainly seemed that the large amount of acid he was receiving was influencing his disease; for the paroxysms became less severe, and ceased altogether on the 8th of May. I feel sure that had he allowed me to persist in the treatment by phenic acid, I would have cured him with that alone. But his condition from the use of the hypodermics was truly deplorable, and I could not blame him for refusing their further use. In Case No. III, I first tried inunctions of oleate of quinia (Squibb's twenty-five per cent. solution), because I wished to see what effect quinia had when given that way, but it should have been given on the 28th instead of on the 27th. In this case I do not think the disease was in the least influenced by the phenic acid.

Reviewing all the cases I have seen in which phenic acid was used, I think its range of usefulness is very limited. In the first place its mode of administration is extremely painful; and, although I have never seen a case in which abscesses had resulted from its use, yet after a few thousand minims have been given hypodermically, the abdomen becomes extremely sensitive. I always give the solution warm and through one puncture. The resulting lump I paint over with tr. iodini. Again, when employed in very large quantities it does seem to have some effect upon the malarial poison. But it must be used in such quantities as seriously

to endanger the proper performance of the function of the kidneys. I have never heard of a case of well-established intermittent fever being cured by this remedy alone. The most I have ever seen it accomplish is a slight amelioration, and that temporary, of the symptoms. I am only sorry that Case No. II would not let me sacrifice his comfort a little longer to the cause of science. The only circumstance where I would ever again use this method of treatment would be one where the stomach and bowels refused to retain quinine and where hypodermics of quinia caused abscesses; or, in other words, it shall always be with me a last resort. Certain it is that it can never replace quinia preparations in the treatment of cases of malarial poisoning.

38 E. *Thirty-third St.*

Clinical Reports.

A Case of Hepatic Abscess, with Aspiration. By RIVES TATUM M. D., Harrisonburg, Va.

In reporting the following case, I simply do so, thinking it would be of interest to the profession, disclaiming any originality as to treatment, or without calling attention to any new symptoms, except the absence of dysentery, which many writers lay stress upon as a premonitory or accompanying symptom of hepatic abscess.

I was called on the 10th of April, 1883, to see M. G., æt. 31, mother of ten children. She said she had a tumor of some kind growing in her right side, and that she suffered with sharp, shooting pains, could not lie on her left side at all on account of the "pulling, drawing pains" it produced in the right side; the temperature was 101°, and pulse 100. She had very little appetite, and complained of a dull headache all the time; was low spirited, and feared some trouble would befall her. Upon examination, I found a large tumor, extending below the ribs, around, beyond the median line in front, and nearly to the spinal column behind; there seemed to be no attachments below, though it was strongly attached above; it would roll under the abdominal walls during manipulation, and was hard and rather unyielding, although I thought detected slight fluctuation. There was

very little pain upon examination. I diagnosed enlarged liver with abscess, although of the latter I was not quite certain. Questioning her closely, I found that two years before she had weaved for two or three weeks continuously, at which time she was three months' pregnant, going to full term, and two months after giving birth to the child she felt darting pains in her right side. There was no dysentery before or at the time of the tumor, as is held by many writers—that dysentery is the cause of hepatic abscess.

Moxon¹ maintains that primary abscess of the liver is at least as doubtful as primary suppuration of the brain, and Budd² holds that a poison generated in the intestine from decomposing material of ulcerations is the chief cause of abscess. ³Bartholow says "the concurrence of hepatic abscess and dysentery is too frequent not to be noticed in some way;" while there are other writers who contend that they are only coincident. Among them Edward J. Waring,⁴ who has had a large experience in India, says, "out of 2,758 cases of dysentery treated, abscess of the liver occurred sixty-eight times, being in the proportion of two and a-half per cent. nearly." Which of these is correct, I am not prepared to say. I only mention them to show how difficult it is to find out the etiology of abscess of the liver.

In this case I cannot account for it, unless in bending over the loom she bruised the liver, resulting in abscess. I put her upon small doses of sulph. mag. in the morning, with nitro-muriatic acid, diluted, three times a day, with tr. opii deodorat., to take when suffering; I also told her to apply oleat. mercury over tumor. Saw her again on the 12th; her condition was about the same; said she had not had occasion to take the opium. Saw her next day; no change, and did not see her again until the 17th, when I asked Dr. J. H. Neff to see her with me. Her temperature then was 100° Fah., and pulse 90. On the 27th, temperature 99½°, and pulse 85. Put her upon tr. ferri. chlor. and quinia, and decided to aspirate as soon as she got in proper condition. By May 5th had improved a little; temperature 99°, pulse 80; no

¹Transactions of the Pathological Society of London, Vol. XXIV, page 116, 1873.

²On Diseases of Liver, page 83.

³Bartholow's Practice, page 170.

⁴An Enquiry into the Statistics and Pathology of some Points Connected with Abscess of the Liver, as met with in the East Indies, by E. J. Waring.

change in size or condition of tumor; told her would operate soon, which I did on the 14th of May, kindly assisted by Dr. Neff. Placing her prone upon the back; without an anæsthetic, I inserted a medium size needle rather anterior to the middle of the tumor. On insertion of the needle I found a good deal of resistance, giving the impression of a solid enlargement, but after some persistence in the use of the aspirator, we noticed a drop or two of thick tenaceous pus in the receiver, showing that it was too thick to flow through the needle I had. I withdrew it and inserted the largest we had with us, when we noticed a decided increase in the flow, although that was slow in passing through the needle; it seemed to grate against something, as if sand was in the tumor. After drawing off five or six ounces of this matter it stopped flowing, when I withdrew the needle and found the opening at the point filled with a chalky material, which no doubt produced the grating with the needle. We decided to desist for the present, hoping that if we had not succeeded in drawing off all the matter, the operation would produce local inflammation, causing the absorption of anything remaining. I inserted one-third grain of morphia hypodermically, and left her quiet. Saw her again next evening, thirty-six hours after operation; found her suffering a good deal; temperature 104° , and pulse 120, with great tenderness over region of tumor. Used one-third grain morphia hypodermically, and ordered fifteen grains of quin. sulph. at once, and left her. Next morning found her much improved, her temperature had dropped to 100° Fah., and a little tenderness still remained over the tumor. On May 17th I found her doing well—no fever and very little tenderness over the seat of operation. She said she felt better than she had done for a long time. On May 19th she had some fever—temperature $99\frac{1}{2}^{\circ}$, pulse 76; was quite comfortable and cheerful; ordered fifteen grains quin. sulph. On May 25th she was sitting up for the first time; had no pain; her condition about the same as before.

She is now (February 28th, 1884,) going about and attending to her household duties, although there is still a considerable enlargement, which each day seems to be diminishing.

The pus, which was drawn off, was odorless, of a light yellow color, and presented under the microscope a homogenous, granular mass, presenting the appearance of broken-down hepatic cells with an occasional pus cell. At the present time (September 17th, 1884,) she is quite well, with some enlargement, though very much diminished.

Original Translations.

From the French and German. By WM. C. DABNEY, M. D., Charlottesville, Va.

Some of the Therapeutical Applications of Caffeine.—In the *Bulletin Général de Therapeutique* for the 15th of August last, there are two papers relating to the use of caffeine. One of these papers is by Dr. Dujardin-Beaumetz, and is entitled "Recent Cardiac Medicines." The other is by Dr. Franz Riegel, and is extracted from the *Berliner Klinische Wochenschrift*.

Dr. Dujardin-Beaumetz refers to the fact that three views have been advanced with reference to the action of caffeine on the heart's action—views which at first sight would seem to be entirely contradictory. The first view is that of Gentilhomme, who claims that the drug exerts no influence whatever on the action of the heart. According to the second, sustained by Trousseau and others, it accelerates the pulsations of this organ; and thirdly, Foussagrives and a few other experimenters claim that it lessens the frequency of its pulsations. A similar diversity of opinion has existed with respect to the action of digitalis, and no doubt the discrepancy can be explained just as it has been done for the latter drug. The experiments of Leblond and Giraud, indeed, have shown conclusively that while in a moderate dose the heart's action is lessened in frequency and increased in force by caffeine, the effect of larger toxic doses of the drug is to produce rapid and irregular action of the cardiac muscle. Caffeine, then, is a cardiac poison, and it is easy to see how, like digitalis, different and precisely opposite effects will be produced by difference in the size of the doses.

More than a century and a-half ago it was observed by a Dutch physician, Zwinger, that caffeine acted as a diuretic, and the same observation has been repeatedly made since.

In 1863, Botkin, of St. Petersburg, recommended caffeine as a diuretic in albuminuria and dropsy, and reported two cases of parenchymatous nephritis with hypertrophy of the heart in which he had obtained most beneficial results from its use, the frequency of the heart's beats being diminished, the blood pressure being augmented, and the quantity of urine being thereby decidedly increased.

In 1866, Jaccoud began to use caffeine in affections of the heart, and some years later Gubler, who considered it an

"ideal diuretic," remarked on the striking effects it produced in cardiac troubles. The doses, however, had, up to the past few years, been very small—never exceeding fifty centigrammes a day. Lepine and Huchard, however, claimed that these doses were too small to get the full benefit of the drug, and they advised and administered as much as two grammes a day with far better results than when smaller doses were administered.

The great advantage of caffeine, says Dr. Dujardin-Beaumont, is that it exerts its diuretic action, even when the kidneys have undergone considerable pathological alteration, so that even in the last stages of cardiac disease it will give great comfort and relief if prescribed in suitable doses.

Dr. Franz Riegel has for more than a year been experimenting with the different preparations of caffeine in his clinic, and has been led to the conclusion that it is an excellent cardiac medicine, worthy of being placed in the same category with digitalis, and in many cases superior to the latter drug. He attributes the fact that its beneficial action has been so often overlooked to two circumstances—first, the insufficiency of the doses employed; and secondly, the form in which it was administered. The German Pharmacopœia gives as the maximum dose twenty centigrammes at a time, or sixty centigrammes per day, a quantity absolutely insufficient, says Riegel, to produce all the good effects to be obtained from the drug.

It is generally administered, too, either as pure caffeine or citrate of caffeine. The comparative insolubility of the pure caffeine renders it rather an ineligible preparation, and the citrate is very unstable, and is rapidly converted into the pure caffeine. All the simple caffeine salts, indeed, rapidly undergo chemical change in solution in water, or on exposure to the air.

Tanret has found recently, however, that caffeine associated with the salts of soda (such as the benzoate or salicylate) may be obtained in a very soluble form, and one which is quite stable. These double salts dissolve in two parts of boiling water and remain in solution when the water becomes cool. In this way a liquid is obtained which may be utilized for hypodermic injections when it is deemed advisable to use the medicine in this way.

In a healthy man an injection of forty centigrammes causes
(1.) Moderate diminution in frequency of the heart's beats.
(2.) Augmentation of the fullness of the pulse. (3.) Increased tension in the arteries.

Caffeine may be used with advantage in all those cases in which experience has shown that digitalis is beneficial.

Riegel used the drug in twenty-one cases. In some of these caffeine and digitalis were used alternately in order to determine their relative merits. Besides the cases in which it would naturally be employed from the rule just mentioned, caffeine was given in myocarditis, fatty degeneration of the heart, in several cases of nephritis with considerable diminution in the quantity of urine, and in one case of exudative pleurisy with great diminution in the quantity of urine and lessening of the blood pressure. In the great majority of these cases the results were excellent, and in those instances in which they were not so good, the effects of digitalis were no better. With respect to the dose, Riegel recommends that the proper quantity for each case be found by careful testing, beginning with a small dose and gradually increasing. It is much better, he thinks, to give the drug in small quantities and at frequent intervals than to give larger doses at longer intervals. The conclusions at which he arrives are as follows:

1. Caffeine as a regulator of the cardiac action compares favorably with digitalis.

2. In suitable doses, it lessens the frequency and increases the force of the heart's action and augments the blood pressure.

3. It rapidly increases the quantity of urine discharged.

4. The indications for its use are the same as those for digitalis.

5. Its maximum effect is produced when small doses are given at frequent intervals.

6. It acts much more rapidly than digitalis, and has no cumulative tendency.

7. In cases where digitalis is powerless, caffeine will often be found efficacious.

8. Narcotics, and especially morphia, should not be administered at the same time with caffeine.

9. Caffeine, and especially its double salts, which are very soluble, may be employed hypodermically with good results.

Riegel says very little of the results he has obtained in other than cardiac affections, but M. Bécher has reported (*Wiener Med. Blat.*, 1884, No. 21,) eight cases of pleurisy, one of exudative pericarditis and four of nephritis (two sub-acute and two chronic), in which he has tested this agent. He found that except in cardiac affections it was not only in no wise superior to other diuretics, but was in many instances decidedly *inferior* to them.

[In a case of sub-acute nephritis, seen in consultation with Dr. R. W. Nelson during the past fortnight, in which there was scarcely any urine voided, caffeine and salicylate of soda were faithfully tried without the slightest effect being apparent.—W. C. D.]

The Use of Massage for Callous Enlargements Around the Urethra.—By Prof. Autal (*Centralblatt für die Gesamte Therap.*, July, 1884, and *Bulletin Gen. de Therapeutique*, August 15th, 1884)

Prof. Autal was lead to try massage for the relief of exudations and indurations in the neighborhood of the urethra in consequence of the very favorable results obtained in similar indurations elsewhere. He practised frictions externally for about eight or ten minutes each day. The results can best be shown by giving an abstract of six cases in which the treatment was resorted to.

1. In the first, the patient urinated drop by drop. At a distance of six centimetres from the meatus a narrowing of the urethra was found caused by a ring-shaped induration which surrounded the urethra. As emollient applications produced no result, it was proposed to perform urethrotomy, but before doing this Prof. Autal determined to try massage. After three sittings he was able to introduce a small metallic sound, and after the expiration of seven days he could introduce a No. 13 English sound, and the indurated mass had in great measure disappeared.

2. In the second case there was a perineal fistula, through which the urine passed and which had been caused by a narrowing of the canal in front of it. In the perineum the urethra was surrounded for a space of twelve centimetres by indurated tissue. After practising massage for five days, a small metallic bougie was inserted, and immediately afterwards an English No. 3. Six days later a No. 13 was passed, and in fifteen days the fistula had healed and the indurated tissue had been reduced to three centimetres in dimensions, and was much more soft.

3. In the third case, the patient for six weeks had only been able to urinate drop by drop. In the posterior part of the cavernous portion of the urethra there existed a narrowing with an annular callus two centimetres in breadth. Prof. Autal could introduce a No. 1 bougie, but could pass no larger size. After six days of massage it was possible to pass a No. 13.

4. The fourth case was one of impermeable stricture in the prostatic portion with an indurated mass, the size of a

haricot. After five days of treatment there was marked dilatation of the canal, and the induration had in great measure disappeared.

5. In the fifth case there was pain in urinating. The urethra was surrounded by indurated tissue from the navicular fossa to the pubic arch. It was barely possible to pass a No. 2 English bougie, and he hesitated to try dilatation on account of the pain. After eight days of massage the indurated mass was greatly reduced, and dilatation could be practised.

6. In the sixth case there was impermeable stricture in the prostatic portion and a mass of indurated tissue. After three days of treatment by massage, No. 3 could be passed. The case was still under treatment at the time the report was published.

As a result of his experience, Prof. Autal thinks massage destined to play an important part in the treatment of indurations in the neighborhood of the urethra. It produces a beneficial action, he thinks, in two ways. First, by softening the hard tissue and rendering it more suitable for dilating instruments, thus doing away with the necessity for urethrotomy; and secondly, by shortening very much the time in which dilatation has to be practised.

So far as relapses are concerned, the author thinks their frequency will be materially reduced by this mode of treatment, but as yet his cases are too recent to enable him to form a positive opinion on this point.

The Pathogenesis of Epilepsy.—Dr. P. Rosenbach, of St. Petersburg, published a paper on this subject in *Virchow's Archiv.* for September 9th, 1884, in which he reaches the following conclusions:

1. The attacks of spasm produced in dogs by electrical irritation of the brain are due to irritation of the motor centres of the cortex, and bear a very striking similarity to the so-called cortical as well as to idiopathic epilepsy in man.

2. Between the so-called cortical and the idiopathic epilepsy there exists no essential difference from a pathological point of view; though with reference to this point, since the first is a symptom and result of organic brain disease, and is not identical in its clinical course with the latter, so we must differentiate between the idiopathic (functional) epilepsy and that which is organic.

3. The convulsive attacks of idiopathic epilepsy, as well as the attacks of petit mal are primary effects of irritation of the cortex of the brain from disease.

4. The great variety in the clinical picture of falling sickness is due to differences in the form and extent of the irritation which produces the epileptic seizures.

5. The theory which locates the seat of epileptic troubles in the centres of the medulla oblongata and pons varolii is not in conformity with the clinical symptoms of the disease.

Spontaneous Peritonitis.—By Dr. E. Leyden. (*Deutsche Med. Wochenschrift*, 1884, 17.)

After referring to the prevailing view that spontaneous or idiopathic peritonitis is a very rare affection, Leyden states his own belief that the rarity has been exaggerated. Most cases of peritonitis, it is true, take their origin in disease or injury of some other structure or organ in the abdomen or pelvis. Most of the recent cases of idiopathic peritonitis have been reported in French journals. Leyden, himself, in the present paper, reports several which terminated fatally. [In the *American Journal of Medical Science* for October, 1881, the Translator reported two case of idiopathic peritonitis due to diphtheria, both of which terminated fatally.] In two of Leyden's cases, in which an autopsy was made, no cause for the peritonitis could be found. The sexual organs were sound in every part.

When not dependent on disease of some other viscus, peritonitis is usually observed in the female sex, and seems to be connected with menstruation. Other circumstances, such as taking cold, indigestion, or irritation of the bowels may possibly cause it. The spontaneous origin of the disease does not prevent it from running, in many cases, a rapidly fatal course with all the symptoms of collapse which are observed in perforative peritonitis. Many cases, however—other than such as are reported by Leyden—ran a mild and not very protracted course, with rapid absorption of the effused fluid or its enclosures in a circumscribed space from which it is possible to remove it by operative measures.

Idiopathic purulent peritonitis shows itself as an infectious disease, similar in many respects to purulent pleurisy, and due, as Leyden believes, to the development of a peculiar microscopic parasite. He attributes the purulent effusions sometimes observed in the pleura in puerperal peritonitis to the migration of this parasite through the diaphragm from the abdominal to the pleural cavity.

It is difficult, he says, to account for the manner in which the germs give access to the abdominal cavity, but probably in those cases connected with menstruation, they pass up through the uterus and Fallopian tubes. No agent is known

which can be employed with safety and which is at the same time efficacious for the destruction of these germs. Bichloride of mercury cannot be administered in sufficient quantity. The results of the use of opium, leeches, ice, etc., are better in this form than in perforative or puerperal peritonitis. In purulent peritonitis an operation like that for empyema naturally suggests itself; but there are many difficulties in the way of operative measures. In the first place it is not an easy matter to make the diagnosis in the early stages of the disease; for, as a rule, the amount of effusion is small, while there is considerable tympanitis. Another difficulty is that of cleaning out the peritoneal cavity; the pleura can be drained without trouble, but the pockets and folds of the peritoneum render it well nigh impossible to clean or drain it thoroughly. As a rule, too, the diagnosis would not warrant surgical interference till a stage was reached where it would be useless.

Analyses, Selections, etc.

Pernicious Intermittent Fever Successfully Treated.—Dr. W. H. Reed, of Jeffersonville, Pa., in the *College and Clinical Record*, August 1, 1884, relates the details of a very interesting case as follows:

Mrs. McG., aged fifty-six years, white, and born in this country. She is married, attends to her domestic affairs, and has given birth to twelve children, and has had three miscarriages; during the severe labor pain almost invariably had convulsions. Four of the children died of diphtheria; the remaining eight are living—the youngest a monomaniac. Her last confinement took place sixteen years ago. She has a vigorous constitution, never suffered from any sickness, excepting last Summer an attack of intermittent fever, which yielded to treatment. Since that time she has had flatulent dyspepsia, which has emaciated her considerably. Her mother and father died at an advanced age, with chronic dysentery.

On Wednesday, May 28th, 1884, I was summoned to attend her in her present illness. From her history, she was taken first with a chill on the preceding Monday; the paroxysm followed each day at regular intervals—each subsequent one becoming worse. When I saw her she was lying

down, contorted with anguish, her countenance depicting pain, skin dry and hot (did not take temperature). Her pulse was rapid and feeble, respiration humid, tongue heavily coated, great thirst, and bowels and kidneys locked. On inquiry I learned that her bowels had not been moved for the past seven or eight days; that was not an uncommon thing, she stated. Her abdomen was considerably swollen, and on percussion elicited an exceedingly tympanitic sound. She had not passed water for thirty-six hours; I percussed over the bladder; there was little or no water in it, but she complained of great pains in the back. She had been vomiting and retching frequently during the paroxysms; everything she swallowed would excite this spasmodic action.

I immediately ordered a bag made about one foot long by six inches wide, pretty well filled with sand, to be heated and applied to the back over the kidneys by lying upon it as hot as could be borne, and as soon as cool reheated and reapplied, and so to be continued until intense erythema of the skin was produced. I also gave, by the mouth, three pil. podophyllin. comp., and a two-grain quinine pill (freshly made), to be given every two hours, so that the patient could get twenty grains of quinine in her system three or four hours previous to the expected paroxysm.

My respected teacher, Prof. Roberts Bartholow, in his treatise upon the subject and in his lectures, invariably lays down the rule, that in order to get the full effects of quinine when administered to interrupt a chill in intermittents, the medicine must be given in such doses and at such intervals that the full effects of the quinine will take place about the time of the expected paroxysm. Such always has been my method, and in all my practice with chills and fever, I have found his instruction of the utmost practical value.

Soon after the employment of the sand bag vomiting and retching ceased, and all medicine taken was retained on the stomach; the bag was employed uninterruptedly until midnight, when the pain was dispelled as if by magic, and a flux of urine brought on. The pills acting now in conjunction, she had frequent evacuations until late in the morning, passing large quantities of urine and fæces. When I made my visit, late in the morning, I found that my instructions had been carried out as to the administration of quinine pills, and thereby the paroxysm avoided. My patient suffering with flatulent dyspepsia for some time past, I now regulated her diet to conform with her present condition. Being feeble from the ravages of the chill, with slight enlargement

of the liver and spleen; I gave her ten drops, three times a day, of the following mixture:—

R. Liq. potass. arsenitis.....℥ijss.
Tinct. ferri. chlorid.....℥vss.—M.

At each septenary period I gave her twenty-four grains of cinchonix sulph. in repeated doses of two grains each every two hours.

On the 16th day of the same month I was sent for hastily, and found her suffering with another chill, which had recurred first on the preceding Saturday. Through inquiries I found that since the previous attack, and the marked improvement on all occasions, she had neglected to carry out my instructions, except as to diet, nor had she taken, at intervals, the tonic, nor at the septenary period the pills. The paroxysm commenced about nine A. M. At two P. M., she was in a high fever (thermometer under the tongue showed an elevation of temperature of 105°); lying in bed, suffering great restlessness, unable to lie still any length of time in one position. Her countenance depicted intense suffering; skin hot, dry and slightly jaundiced; pulse frequent and feeble; respiration hurried, and at times gasping; had not eaten anything of consequence since Saturday; thirst great; bowels moved once on the preceding day, the feces passed being dry and dark; no stoppage of urine; complained of pain in the lumbar region, epigastrium and right and left hypochondriac regions, the latter being from the diaphragm, and due to repeated vomiting and retching.

My treatment was as follows: Immediately a hypodermic injection of one-sixth grain of morphiæ sulph.; hot sand bag to lumbar region; one pil. podophyllin. comp., and two grains of quiniæ sulph., in pills, every two hours, until twenty grains were taken. About 6 P. M., I was sent for hurriedly, with the statement that my patient was dying. On my arrival by her bedside, I found her in a sinking condition; in the meantime she had had several convulsions; was now at times in a low delirium, muttering inaudible and unconnected sentences, and picking at the bed-clothes. Her countenance was relaxed, tired, worn and haggard; skin somewhat cooler and pulse almost imperceptible; heart sounds feeble; respiration slow and grasping. The pain had left the back, from the application of the sand bag. I immediately stimulated her freely with whiskey, which at first produced retching, but not vomiting; then I was informed that on two occasions previously she had vomited blood. I ordered dry heat over her stomach, which success-

fully allayed further vomiting and retching, thereby enabling her to retain all medicine administered. A strong milk punch was given at intervals during the night, and the quinine pills continued as before ordered. Next day I found my patient much improved; she was lying quietly in bed, her mind clear and buoyant, but she was much exhausted and debilitated. The delirium passed off about midnight, and her bowels moved freely toward morning. Her skin was almost normal in temperature, and but slightly jaundiced; heart sounds regular, but slightly feeble; respiration normal; no thirst; tongue coated with a rather heavy fur; she ate some prepared gluten and milk for breakfast. I prescribed—

R_y. Hydrargyri chloridi mitis.....gr. ij
 Pulv. ipecac.....gr. ij
 Pulv. ingluvin.....ʒj.—M.

Fiant chartæ viij.

Sig.—One to be taken every two hours.

I also gave her ten-drop doses of Fowler's solution three times a day. When I saw her again two days later, my patient was out of bed, with skin comparatively clear; appetite returned, and she was commencing to feel strong again. At the septenary periods I prescribed twenty-four grains of cinchoninæ sulphas. One week later I diminished the Fowler's solution to five drops three times a day. Two weeks later I saw my patient; she was feeling exceedingly well, with no symptoms of a recurrence of the chill.

Antipyrin.—In the *Medical and Surgical Reporter*, August 21, 1884, Dr. Brinten refers as follows to the new antipyretic alkaloid:

Knorr, in Erlangen, has manufactured from chinolin a new alkaloid, called, on account of its antipyretic effect, antipyrin. Dr. Paul Guttman, in Berlin, has recently investigated its effect, and published the results of his observations in the *Ber. Kl. Woch.*, 20, 1884.

He made use of the drug fifty-seven times in twenty-seven patients laboring under a high temperature. The cases experimented upon were as follows: Six fibrous pneumonia, six typhoid fever, two scarlatina, two febris recurrens, two erysipelas faciei, one each of variola, morbilli, pleuritic exudation, erysipelas cruris, and abscess of the arm, and four of pulmonary phthisis with continually high fever. The temperature was usually taken in the rectum, in a few cases in the axilla, and generally every hour during the day, and every two hours during the night.

The results teach that antipyrin, in the dose of sixty-four to ninety-six grains, has a certain and high anti-febrile effect, at least lasting five hours, and often much longer. It is best to administer the remedy in two or three doses, each of thirty-two grains, given every hour in watery solution, to which some corrigens for the taste has been added, or in powder form in wafers.

The temperature sinks continually and gradually, already one hour after the first doses, at least by half a degree, and then goes on falling, until two hours after the third doses, five hours after first, the decline has usually reached its height, and mounts up to thirty. Sometimes the effect continues for eighteen hours. When later the temperature ascends again, it also does so slowly and gradually. The same effect can be achieved by one single doses of sixty-four grains, and also by five consecutive (every hour) doses of sixteen grains each.

Together with the temperature, the frequency of the pulse declines. In cases where the decline in temperature is great, active perspiration is apt to occur. Disagreeable effects were not observed; only in one case vomiting ensued. Generally the remedy was well borne, even in cases where quinine caused emesis.

Antipyrin has, therefore, a great advantage compared to kairin. The latter produces its temperature-decline by a rigor; its effect is sudden, and lasts but a short time, when temperature again rapidly ascends. Antipyrin has a similar effect to quinine, but as it is much cheaper, and is generally better borne by the stomach than quinine, its general adoption as an antipyretic, in preference to quinine, can be recommended.

A New Fever.—To show our readers that the fever which has appeared in different portions of our State this year—especially in Richmond and some of our other cities—has not been confined exclusively to Virginia, we take the following article from the *Texas Courier Record of Medicine*, September, 1884, written by Dr. Peyton Turner, of Abilene, Tex. It will at once be observed that this disorder which he calls “Abilene fever,” has symptoms very much in common with what many of us have this year called “typho-malarial fever.” Dr. Turner says:

About twelve months ago I began to meet with a peculiar form of continued fever in my practice, and after diligent investigation I was constrained to pronounce it a new disease.

It was of so frequent occurrence I began to need a name for it, and in lieu of no name I began calling it the "Abilene Fever" last Summer, not knowing it was prevalent in any other portion of the State. Numbers of cases of it have fallen under my observation lately, and by this time it is tolerably well known in this city as the "Abilene Fever." I was called several weeks ago to see a little girl who had been sick several days, and her parents told me they could not break the fever with quinine, and they were afraid she was taking the Abilene fever. It so happened that their fears were not unfounded, as it proved to be this fever and lasted several weeks. Her little brother has contracted the disease also, and is at present sick.

So far as my observation has extended, I claim now, as I have for more than twelve months, that it is a new disease; notwithstanding I get the name of being a *Smart Aleck*, as a result for promulgating my views on this important disease. I regard this new fever as being caused by a specific poison conveyed by means of the atmosphere, and like other specific diseases, self-limited. It is not contagious, or but slightly so. It has a predilection for the Summer and Fall. It prefers for its victims the younger class, and both sexes suffer in about equal proportions. The liability to the disease greatly diminishes after twenty years of age; from three to fifteen are the ages most susceptible to the disease. It is sometimes associated with malaria; this latter element is easily eradicated by quinia, but quinia has no influence on the disease *per se*. Sweating seems to be a permanent feature in some cases; the extremities are cold as marble, and yet have a temperature of may be as high as 101°. Mildness of the attack characterizes some cases; and diarrhœa, when present, is sometimes extremely hard to control; in fact, it seems also self-limited, resisting such measures as opium, kino, catechu, bismuth, pepsine, iron sulphate, copper sulphate, etc., for several days, and then gradually getting better. Some cases are remarkably exempt from typhoid symptoms, even when the disease persists three or four weeks, though there are exceptions to this rule. It bears a tolerably close resemblance to relapsing fever. Its mean duration is about twenty-one days.

I regard the mild and persistent elevation of temperature, muscular pains, cold or cool extremities, sweating, etc., the most prominent diagnostic symptoms, naming them in the order of their relative sequence, and then if quinine proves of no utility I regard the diagnosis as highly probable. Dry,

hot weather favors the production of this fever; it has no important sequellæ, but convalescence seems to be rather tedious. As to whether one attack gives immunity from subsequent attacks I am unable to say, though it is more than probable, as in cases of zymotic or germ diseases. This is a highly important point yet to be decided.

As regards its treatment I would humbly call the attention of the profession to the supposed value of arsenic in large doses. I administered ten gtts. of liq. Fowleri three times daily (or its equivalent, according to age,) in four cases, with marked benefit as regards the general condition, and if the stomach is too irritable I give half the quantity, but twice as often. Quinine *does no good* in this fever, but I think arsenic is deserving of further trial; in fact, I put another case on the arsenic treatment this day after treating the case tentatively a week.

Method of Employing Salicylic Acid.—In the *Medical World*, August, 1884, Dr. J. E. Hall, of Emlenton, Pa., offers the following as a pleasant salicylic acid combination:

The beneficial effect of salicylic acid in acute rheumatism being so generally recognized, the objection to its use in some of its combinations on the part of certain patients, on account of the unpleasant sensation of fullness and giddiness in the head, sick stomach, etc., following its administration, suggests a formula which, in the hands of the writer, has combined the greatest therapeutic effect with the least objectionable features of any combination with which he is familiar. The mixture of salicylic acid with soda and ammonia is mentioned in "*Naphey's Medical Therapeutics*," on the authority of Dr. E. Prideaux, (*Practitioner*, 1878,) and the favorable mention there made of the combination is confirmed by its use in a large number of cases, where the happiest results have gratified both patient and physician. I have not generally found it necessary, however, to give the acid in as large doses as in the formula referred to, and I have otherwise modified the prescription which is here given:

Ry. Acid. salicylic.....	℥ ss
Soda bicarb.....	
Ammon. carb.....	℥ ij
Glycerine.....	℥ ss
Aqua cinnam.....	℥ ij

M.—Sig. Teaspoonful in a little water, every two hours.

I have generally been able to lengthen the intervals between doses after a short time. The preparation is made

fresh when wanted, and in combining it considerable effervescence will result when the fluids are added to the pulverized salts in a mortar.

In not only acute, but in sub-acute forms of rheumatism has its use proven beneficial. In some instances small doses of morphia have been added to the formula when suffering was intense.

Arsenic in Gastric Ulcer.—Of course, we all know that regulation of the diet is of paramount importance in the treatment of gastric ulcer. But, making due allowance for the great improvement which always follows the regulation of the diet, Dr. John Strahan (*Brit. Med. Jour.*, June 21, 1884,) thinks the treatment by small doses of arsenic gives results to be obtained by no other mode of treatment. More than, at the outside, two drops should never be given, as the irritating action would then commence to the injury of the patient. By an action on the end organs of the gastric nerves, small doses relieve the pain wonderfully, and improve the general tone of the gastric mucous membrane, curing the gastric catarrh which exists at least in the immediate neighborhood of the ulcer, and thus relieving the patient of the vomiting of mucus, which is sometimes an important feature of the case. We also know that a weak solution of arsenic will, out of the body, heal unhealthy ulceration, *e. g.*, cynchia, or even when given internally, so that it is not strange that it should act locally as a cicatrizing agent on a gastric ulcer. Nitrate of silver, the next best remedy, recommended by such men as H. C. Wood, Da Costa, and Wilson Fox, is not nearly so efficacious, either in relieving the pain or in promoting cicatrization. Indeed, in all gastric and intestinal affections in which nitrate of silver is so much recommended and is so successful, he believes that the small dose of arsenic is far more valuable, and it is certainly far more convenient. Bismuth is highly recommended by Brinton and many high authorities, but it has been recently said that it very often owes its powers as a sedative to the stomach, to a trace of arsenic which it contains.—*Med. and Surg. Reporter*, August 2d, 1884.

Mortality Statistics of Married Life at Different Ages.—In an address to young men, Dr. W. Pratt, of London, gives the following facts: In the male sex, from twenty-five to thirty years of age, one thousand married men furnish six deaths; one thousand bachelors furnish ten deaths; one thousand

widowers furnish twenty-two deaths. If, however, the marriage be contracted before twenty, it is found that the mortality is seven times greater than among the unmarried. In the female sex the same facts hold true. Marriage under twenty increases the death rate seven-fold, while marriage after twenty-one greatly diminishes the mortality. Young married people from eighteen to twenty die as rapidly as old people from sixty to seventy. Thus it appears that marriage after twenty one makes life healthier as well as purer. Marriage after thirty years greatly increases the mortality of females in childbed. But in spite of all this, people will marry without any reference to reason or sound physiological laws. The majority will measurably follow the physiological law from simple instinct, and the rest will make a shipwreck of life.—*Detroit Lancet*, August, 1884.

Typhus Fever Without Contagious Origin.—In the *American Journal of Obstetrics*, August, 1884, Dr. R. J. Kinkead of Galway, Ireland, offers the following case and conclusions. He says; The following case seems to me to be an example of a zymotic disease originating *de novo*, that is, without exposure to contagion:

G. P. was committed to Her Majesty's Prison, Galway, charged with murder. I examined him carefully on his admission, and found him apparently in perfect health, only it struck me that he did not appear at all conscious of the nature of his offence. Seven days afterwards, he was brought up at Petty Sessions under police escort, and committed for trial at the next Assizes. I again examined him on his recommitment, although he was only absent for a day, and he appeared to have a greater appreciation of his condition, and to be depressed and anxious. He remained well and in perfect health to all appearance for five weeks after his commitment, or six weeks from his first being sent in.

At the end of that time, I was sent for, and found him very ill: body and extremities perfectly cold; face bathed with perspiration; pulse almost imperceptible at wrist; at the same time heart sounds were fairly strong; the face was pale, pupils dilated; he trembled violently, and appeared unconscious of everything going on about him, and kept rapidly and wildly calling out: "God don't damn me, Devil don't damn me." He was somewhat better in the evening, and reaction had set in next morning; in the course of the day he got bad again, and that night he became violent, attacking with fury the warder in charge of him, and tore

his uniform to atoms. After that he became quiet, and passed through an illness identical in its symptoms with typhus fever, ending after twenty-one days in a crisis.

It seems to me difficult to understand how this could possibly be a case of infection.

He was in good health up to his admission; he was then isolated for seven days; he went out with an escort, not one of whom was taken ill; after his commitment, he was bathed, and put into fresh clothes; he remained well for five weeks; then without any prior period of malaise or sickness is suddenly struck down; he has maculæ, sub sultis, black and dry tongue, sordes on his teeth, high temperature, delirium, unconsciousness to passing events, incontinence of urine and feces, extreme prostration, and finally, a well-marked crisis. Up to the last couple of days of his illness, the only other case of sickness in the prison was in the same ward—a man suffering from an injury to his eye. Yet neither this man nor any of the persons coming in contact with him were affected either with typhus or any febrile complaint.

I have seen typhoid spring up in an isolated country house where there was no possibility of the dejecta of an infected person being deposited in the cesspool which originated the disease, and in the same house and at the same time another member of the family passed into a condition of general asthenia, with headache, languor, and loss of appetite, which disappeared on removal to a healthy residence. There are few men in practice who have not seen cases of specific disease of which they could not trace the contagion, while hybrid conditions in which more than one disease was mixed up are not uncommon.

It may be heresy to propound the opinion that specific diseases not unfrequently spring up *de novo*, but also that they do not invariably breed true. If we admit the theory of a *contagium vivum* of disease being caused by micro-organism, then there is nothing improbable in the belief that the same class of micro-organisms at different stages of development, and falling in different soils, produce different diseases—and in this point of view, that is, that zymotic diseases do not invariably reproduce themselves; their relationship to the puerperal state affords strong presumptive evidence, which is further strengthened by the effects not unfrequently produced in cases of recent operations.

Apomorphia.—In the *National Druggist* for October, there

is an excellent little article on the employment of this drug, by Dr. Frank L. James, St. Louis, Mo. We have often expressed ourselves to the same effect as Dr. James—namely, that this extremely valuable alkaloid is not sufficiently employed by the profession generally. If physicians in the country knew what a safe, sure, and sudden emetic they possess in the drug they would never be without it. Dr. James says:

I have on two or three occasions in these columns urged upon the profession the more frequent use of this remedy. I know not why it is, but for a drug that has so many qualities to recommend it, and so few bad ones to retard its usefulness, apomorphia has made wonderfully little headway since its first introduction into the medical armory. It is a certain, safe, and painless emetic, and a most valuable expectorant. In the hundreds of times that I have administered it hypodermically during the past ten or twelve years it has never once failed me, nor has it ever caused an ulcer at the point of injection. I can recall at least a half dozen instances, were this the place to recite them, where I am convinced death would have occurred had it not been for apomorphia. It was absolutely necessary to empty the stomach immediately, and there was no other way by which this could be done (the stomach pump being out of the question at the time). The *Gazetta degli Ospitali* gives the following formulæ for the exhibition of the remedy:

For hypodermic injection: Apomorphiæ hydrochloratis, $1\frac{1}{2}$ grains; aquæ destillatæ, $2\frac{1}{2}$ drachms; M. solve. For an adult a Pravaz syringe full, and for children in proportion.

R̄. Apomorphiæ hydrochlor grns. 12
 Aquæ dest..... 5 22
 Glycerinæ puræ..... m. 75
 Acid muriat., dil m. 5

Misce, solve. To produce vomiting in an adult, give a teaspoonful every hour until the result is attained.

As a simple expectorant, the following will be found to answer every requirement:

R̄. Apomorphiæ hydrochlor grn. $\frac{1}{2}$
 Aquæ dest..... 5 31
 Syrupi simp 5 1
 Acidi hydrochlor., dil..... m. 5

Misce, solve. For adults the dose is a teaspoonful every two hours, children in proportion.

It may also be used in powder, as an expectorant, by mixing it thoroughly with pulverized white sugar, as follows:

Muriate of apomorphia, $\frac{1}{4}$ grain; sugar of milk, or pulverized white cane sugar, 80 grains. Mix thoroughly and divide into twenty papers. Dose: One paper every two hours.

A Case of Worms in the Bladder.—Is reported by Dr. E. H. M. Parham, in the *Southern Medical Record*. The patient sought medical advice for a slight pain and soreness in the region of the kidneys. He was directed to take half dram doses of fluid extract of buchu. Very soon after he commenced using the buchu he discharged several living worms with his urine, and continues to discharge them occasionally. They are from one-half to one inch and quarter long and about twice as large as number eight spool thread. They have dark colored spots or bands on them.

As santonine is chiefly excreted by the kidneys, we do not see but that it would be quite as efficient for worms in this situation as for worms in the alimentary canal. For the same reason oil of turpentine would probably be efficient.—*Medical World*, August, 1884.

Case of Poisoning by Potassium.—Dr. Yemans, of Detroit, in the *Detroit Lancet*, for August, 1884, reports the following interesting cases:—The patient was a young man who had been at work in the factory of Parke Davis & Co., engaged in making lozenges of chlorate of potassium. He was attacked by symptoms resembling those of scarlet fever. He had a high fever, vomiting, became delirious. On the second day a rash appeared, at first erythematous, then somewhat papular. The next day the skin all over the body appeared as if it had been macerated in hot water. You could roll it up in folds. After this it became desiccated and finally it desquamated. The patient lost one eye by extension to the cornea of this affection of the skin.

He confessed having eaten pretty freely the chlorate of potassium lozenges, supposing them quite harmless. In the early part of the attack he had hæmaturia. The mucous membrane of the mouth was also affected.

Dr. Noyes: Is there any account in the books of poisonous effects such as have been described produced by potassium chlorate? The effects, as I have seen them described, are manifested in derangement of the kidneys and stomach.

Dr. Connor: Dr. Jacobi says that he regards the quantities of this drug which are often prescribed, on the authority of the books, as dangerous, and believes that the kidneys are frequently damaged by them.

Dr. Bradley: In 1869 there was a man brought to the Marine Hospital who had been injured at the time the "Guiding Star" was blown up. There were no bruises or cuts on his person, but he had suffered from shock to the nervous system. In three days he developed a rash somewhat similar to that described by Dr. Yemans. He was red as a boiled lobster all over the surface. The next day the whole skin was eczematous, and the patient suffered terribly from pruritus, which was somewhat relieved by liberal applications of cold cream. Afterwards there was desquamation of the cuticle. This patient said that some years before he had met with a similar accident, and had been affected, as a result, in precisely the same way. Apparently the rash resulted from shock to the nervous system.

Book Notices, &c.

Medical Diagnosis with Special Reference to Practical Medicine. A Guide to the Knowledge and Discrimination of Diseases. By J. M. DA COSTA, M. D., Professor of Practice of Medicine and of Clinical Medicine at the Jefferson Medical College, Philadelphia, etc. Illustrated with Engravings on Wood. Sixth Edition, Revised. Philadelphia. J. B. Lippincott & Co. 1884. 8vo. Pp. 967. Cloth. Price, \$6. (For sale by West, Johnston & Co., Richmond, Va.)

We have during the past ten years several times noted the appearance of a new edition of this standard work, and each time with all the meed of praise the book deserves, and now we hardly know what new to say about it. It is like all excellent things—always excellent. In this last edition we notice much new matter introduced, with a number of new wood-cuts. A thorough revision of the subject-matter has been made by the author, and altogether we must pronounce it an improvement even over the fifth edition, which we thought at the time of its issue almost perfect. The fact that a German and Spanish translation have been made shows plainly the estimation in which our foreign professional friends hold Dr. Da Costa. We wish every medical student could possess this work, although perhaps it would only be valuable for the more advanced students—those who, when the millenium of medical tuition occurs, will be in the third year graded class. In saying this we by no means would have it inferred that practitioners will not receive great benefit from the work; it should be in the hands of

every practising doctor, especially those who have lately passed through college. An attempt is made by Dr. Da Costa to offer a work which on the one hand is not overburdened with too minute details so as to be unwieldy, and on the other not so meagre in practical information as to be unworthy of examination as a full manual. In this his success is so evident that the owner of the work can always rely upon it for advice in time of need. C.

A Treatise on Syphilis in New-Born Children and Infants at the Breast. By P. DIDAY, Ex-Surgeon to the Hospital de L'Antiquaille, Lyons. Translated by G. WHITLEY, M. D. With Notes and an Appendix by F. R. STURGIS, M. D., Professor of Venereal and Skin Diseases in the N. Y. Post Graduate Medical School, etc. New York. Wm. Wood & Co. 1883. 8vo. Pp. 310. (For sale by West, Johnston & Co., Richmond, Va.)

The October, 1883, issue of Wood's Library of Standard-Medical Authors supplies a place in medical literature never before so well filled in our language. It is of course unnecessary to say anything concerning the value of M. Diday's work as a syphilographer, standing as he does at the head of the French profession in his specialty since the death of Ricord, and the fact that the New Sydenham Society selected Dr. Whitley for the task of translating shows his full adaptation for the work. Together with this, Professor Sturgis has greatly increased the value of the volume by his valuable annotations, and appendix of forty pages. We are probably safe in saying that this is the standard work on infantile syphilis, and we doubt not it will remain so for many years. Dr. Sturgis not long ago contemplated writing a volume on this special subject, and while we may regret the loss of a book written in his peculiarly pleasant style, we would rather have the present work, as, besides the great experience of the French specialist, Dr. Sturgis has been able to see the points of interest not fully touched upon, and from the full storehouse of his knowledge of venereal disease has supplied whatever might be wanting. The points which are especially touched upon by this latter authority relate mainly to questions which have arisen in the pathology and treatment of this form of disease. Nothing in this volume has seemed to us more interesting and valuable—leaving out the appendix—than the portions relating to Medico Legal Bearings and the first chapter devoted to treatment. Those chapters should be read and studied by every physician whose practice is at all connected with venereal affections. C.

Handbook of the Diagnosis and Treatment of Skin Diseases.

By ARTHUR VAN HARLINGEN, M. D., Professor of Diseases of the Skin in the Philadelphia Polyclinic and College for Graduates in Medicine, etc. With Two Colored Plates. Philadelphia. P. Blakiston, Son & Co. 1884. 12mo. Pp. 282. (For sale by West, Johnston & Co., Richmond, Va.)

The author of this unpretentious little volume has certainly attained the end he sought in making it a book for ready reference. While he makes little or no attempt to deal with questions of etiology and pathological anatomy, he has succeeded in preparing a practical work for that class of doctors who only occasionally treat diseases of the skin, and for that reason desire just such a handbook. Those diseases most commonly met with in every-day practice are fully detailed, not so much attention being paid to those rarely seen by the physician.

The author has made much use of Duhring's Treatise in preparing this book, a fact which of course gives standard value to the volume. An alphabetical plan of arrangement has been adopted in describing the several diseases which is a great help in referring to the book. Eczema is considered at length, fifty-five pages being given to it, this portion being one of the best essays on the treatment of this unpleasant affection we have ever read. It is worth the price of the book alone. An appendix accompanies the book, giving an excellent dietary for patients afflicted with skin diseases. To any general practitioner needing a handbook of this kind we can fully recommend Van Harlingen's. C.

Veterinary Medicine and Surgery. Compiled from Standard and Modern Authorities, and Edited by F. O. KIRBY. Illustrated by Four Colored Plates and One Hundred and Sixty-eight Wood Engravings. New York, Wm. Wood & Co. 1883. 8vo. Pp. 332. (For sale by West, Johnston, & Co., Richmond, Va.)

This, the December, 1883, No., of Wood's Library of Standard Medical Authors is something of a new departure in the line of medical works. We think, however, that no doctor who has subscribed to these handsome volumes will regret the fact that this special one deals with veterinary questions. It seems to have been prepared with great care, and the attempt made to present in a concise manner a manual which shall be a guide in the treatment of diseases of the horse, is evidently to a large degree successful. The well known treatise of General Fitzwygram on Horses and Stables has been taken as a basis for the work, and the editor

has drawn upon all other standard sources of information, besides incorporating much practical knowledge of his own. No attempt has been made to deal with the physiology and pathology of the horse, but rather to offer in plain language the best and latest methods of diagnosis and treatment. We are decidedly of the opinion that the first or introductory chapter is the most valuable in the book, as it explains at length the different methods of nursing, giving medicines, minor surgical treatment, etc., the very things which all horse-owners should be perfectly familiar with, but which knowledge, in cities at least, is usually confined to the professional veterinarian. We would recommend the book if there were nothing valuable in it save this first chapter. The colored plates accompanying the text are especially fine, and the wood cuts are in most cases all that could be desired. The posological table for the horse from Morton, given in Chapter XV, adds greatly to the value of the book. C.

A Treatise on Physiology and Hygiene. For Educational Institutions and General Readers. By JOSEPH C. HUTCHISON, M. D., Surgeon to the Brooklyn City Hospital, etc. Fully Illustrated. New York. Clark and Maynard. 1884. 12mo. Pp. 319. Cloth. Price, \$1.08 (From Publishers.)

This is decidedly one of the best manuals on physiology for scholars and non-professional readers we have ever seen. Not only is the author's style easy and pleasing but the matter of the book is a most excellent medium between a too much condensed treatise on the subject, and a too extended volume. As a rule the popular works on physiology do not fairly represent the present state of this branch of science, and are too often careless compilations.

To this class the book under consideration does not belong, as every chapter shows the extreme care bestowed upon it by a conscientious student who is fully posted upon all advances made in this study.

Several years ago, when we saw the proof-sheets of the first edition, we predicted for the work a popularity which has been fully realized, as the treatise has become a standard in most of the high schools of the country. The views which Dr. Hutchison holds and teaches on hygiene and kindred topics are at once clear and practical, and however much we may learn in the near future as to better methods of protecting life and health, the child who studies this manual will have laid a solid foundation of knowledge upon these subjects which can never be overturned. One of the

peculiar features of the book is the notes from distinguished medical authorities added to the different chapters. Altogether we think that no one engaged in teaching the higher branches of study can afford to be without this as a textbook. C.

A Treatise on Ophthalmology. For the General Practitioner. By ADOLPH ALT, M. D. Illustrated. Chicago, St. Louis, and Atlanta. J. H. Chambers & Co. 1884. 8vo. Pp. 244.

We must put in our protest against the binding adopted by the "Chambers" firm. It may suit the taste of many, but we must confess to being too fastidious to like it, and, unless we have a copy not meant for distribution, we really think the paper of the book is not as good as the writing.

The work is written mainly for the general practitioner, not the specialist, and the attempt has been made to render the matter valuable to the former in ways which other volumes on ophthalmology do not profess to follow. It is plain that the desire of the author is to provide for the every-day wants of the ordinary physician, to describe those conditions of eye trouble which are most frequently met with, and we think he has merited approval. The chapter on minor manipulations in the treatment of eye-diseases is most excellent—one of the best in the book, and deserves the careful consideration of the reader. The style of the author is plain, and he deserves credit for his mainly successful endeavor to present a work on ophthalmology which shall be acceptable and useful to the non-specialist. Notwithstanding some minor defects, it is worth buying. C.

The Medical Graduate and His Needs. By GEORGE C. WELLNER, M. D. Detroit. George S. Davis. 1884. 16mo. Pp. 100. (By mail from Publishers.)

This little work is presented to the profession by the publisher in a very attractive manner, the covers, the paper, and the imprint are all excellent, but whether there is any real necessity for the contents is a question we are inclined to decide in the negative. We do not propose to speak in a manner too utilitarian, but we can scarcely think there is much that is really needful to the general practitioner in this book. It is well written, from a literary point of view, but it lacks the practical value which most of George Davis' publications possess. We cannot see that this book supplies "a want," well prepared as to its subject matter as it is.

Dr. Wellner bases his little treatise on a number of articles of his own, written for the *New York Medical Journal*, and shows considerable observation and reflection in the manner in which he treats his subject. He has evidently studied the question fully in his way, and those who desire to read his views in the matter will be pleased with the neat form they are offered in. It is written from a higher standpoint than a popular book of the kind offered to the profession a few years ago by a Baltimore doctor, but we are very sure that it will never attain the circulation gained by the work referred to. To most medical graduates the answer to the question as to what their greatest needs are would be—plenty of patients. Whether Dr. Wellner be right or wrong in his ideas of the real needs of a young graduate, it is certainly true that in our busy age few will be found to carry them out as thoroughly as the author thinks should be done. C.

Practical Manual of Diseases of Women and Uterine Therapeutics. By H. MACNAUGHTON JONES, M. D., M. C. H., F. R. C. S. I. & E., Examiner in Obstetrics, Royal University of Ireland, Formerly Professor of Obstetrics in the Queen's University, Ireland, etc. New York. D. Appleton & Co. 1884. Fully Illustrated. 12mo. Pp. 410. (For sale by West, Johnston & Co., Richmond, Va.)

At first sight of the title of this volume we felt tempted to criticise harshly the appearance of another addition to the many works on female diseases already published, but further examination showed that this distinguished specialist had written a book which fills a place before unsupplied. The trouble with most works on gynæcology is, that they are adapted to the needs of the practitioner alone—they are too full and advanced for the student. Grailly Hewitt's is undoubtedly one of the finest works of the kind in our language, but is hardly better adapted to the use of an undergraduate in medicine than Euclid would be to a primary scholar. This manual is admirably suited to the wants of the student, and if the practising physician desires a concise work on women's diseases and their medical therapeutics, he could find none better than this. It is true that the author has omitted much surgical matter to bring the contents of the book down to a certain limit—for instance, the operative procedure of ovariectomy is entirely wanting—but every question dealt with in the work is fully complete. We cannot see how those chapters devoted to case examinations and minor operations could be improved upon. Everything there is related clearly and concisely, and the style is pleas-

ant yet impressive. We notice that in certain cases the author prefers as an anæsthetic, chloramyl, composed of chloroform with two minims of nitrite of amyl to the drachm, and it seems to us that such a mixture could often take the place of pure chloroform, in many minor operations at least. The idea is excellent. He uses it with a Junker's inhaler, but outside of the question of economy we can see no particular advantage in such implements over our improvised cone. In this work the author pays our Dr. Goodell the high compliment of specially advising both practitioners and students to read his admirable "Lessons on Gynæcology." We are very glad to possess this manual, and wish our friends the same good fortune. C.

The Elements of Pathology. By EDWARD RINDFLEISCH, M. D., Professor of Pathological Anatomy in the University of Würzburg. Translated from the First German Edition by WM. H. MERCUR, M. D., (Univ. of Pa.) Revised by JAMES TYSON, M. D., Professor of General Pathology and Morbid Anatomy in the University of Pennsylvania, etc. Philadelphia, P. Blakiston, Son & Co. 1884. 12mo. Pp. 263. Cloth. Price, \$2. (For sale by West, Johnston & Co., Richmond, Va.)

This excellent little work is precisely what it purports to be, a careful consideration of the elements of pathology. It is not what could be called a text-book, but a book which is an attempt to establish a ground-work for more extended study of the subject, and for that reason a first-class volume for the student—whether new graduate or old practitioner. The translation from the original has been carefully done, and the reviser has evidently gone over the entire contents with much attention, endeavoring to give the exact meaning of the distinguished author. Prof. Rindfleisch has long been considered an authority on pathological histology, and the thanks of the profession are due to the gentlemen who have taken the pains to place his views and theories before the profession. The work is written from the most modern standpoint, and reflects clearly all that is at present known of general pathological processes. We do not doubt but that every practitioner who reads it will be as thoroughly pleased with it as ourselves. The study of the nature of disease is always an interesting one, especially if the ideas presented are those of an experienced observer. It is one of the misfortunes of our profession that those physicians who belong to the class of real observers have so little time from their practice to write carefully and clearly, while those who have the time and opportunity to write fully are fre-

quently those whose practice and study are so limited as to afford them all the time necessary. This book is one which could well take the place of more pretentious treatises upon the subject, and every doctor should have it in his library for careful reading during his spare hours. C.

PAMPHLETS, REPRINTS, ETC., RECEIVED for which we have no room for fuller notice, etc.; but most of which can be obtained by enclosing a letter stamp for pamphlet to the respective authors named.

Adherent and Contracted Prepuce, Commonly Called Congenital Phimosis. By DE FOREST WILLARD, M. D., Lecturer on Orthopædic Surgery in the University of Pennsylvania, etc. [Dr. Willard is opposed to the frequent employment of circumcision for this affection, and reduces the deformity by a stripping method which is far more preferable in the majority of cases. In this pamphlet the Doctor shows how easily his mode of operation is accomplished.] (Reprint from the *Philadelphia Medical Times*, June 30, 1883.) Pp. 7.

Infusion of Jequivirity in Inveterate Pannus, With a Report of Several Successful Cases. By EDWARD S. PECK, M. D., Surgeon to the Eye and Ear Department of the Northwestern Dispensary, New York, etc. [The seventeen cases reported show extremely successful results.] (Reprint from the *Medical Record*, July 14, 1883.) Pp. 11.

Introductory Address Delivered Before the Medical Class of Dartmouth College, August 1st, 1883. By LOUIS ELSBERG, A. M., M. D., Professor of Laryngology and Diseases of the Throat, etc. [This address, printed for distribution by the members of the class at their own request, is one of the best of the kind we have seen.] Pp. 23.

Changes in New England Population. By NATHAN ALLEN, M. D., LL. D. [An article showing great study of the subject.] Reprint from the *Popular Science Monthly*, August, 1883.) Pp. 16.

Delayed and Non-Union of Fractures. By N. SENN, M. D., Milwaukee, Wis. [Dr. Senn's reputation as a surgeon is sufficient to denote the value of this monograph. (Reprint from the *Weekly Medical Review*, September 29, 1883.) Pp. 21.

The Electro-Osteotome. A New Instrument for the Performance of the Operation of Osteotomy. By MILTON JOSIAH ROBERTS, M. D., Professor of Orthopædic Surgery and Mechanical Therapeutics in the New York Post-Graduate Medical

School, etc. [From the description, this instrument would seem to be at once ingenious and practical. [Reprint from the *Medical Record*, October 27, 1883.] Pp. 8.

Annual Address Delivered Before the American Academy of Medicine, October 10th, 1883. By HENRY O. MARCY, A. M., M. D., President of the Academy. [An excellent address on the recent advances of sanitary sciences.] Pp. 23.

Bichloride of Methylene Used in a Junker's Inhaler. By JNO. H. MCINTYRE, A. M., M. D., Professor of Surgical Diseases and Clinical Gynæcology in the College for Medical Practitioners, St. Louis, Mo. [Dr. McIntyre reports the successful employment of this anæsthetic in nearly fifty cases in his practice.] (Reprint from the *St. Louis Medical and Surgical Journal*, October, 1883.) Pp. 8.

The Increase of Insanity in the United States, Its Causes and Sources. By FOSTER PRATT, M. D., Kalamazoo, Mich. [This little work is based upon a careful study of the 10th census, and shows the chief increase to be among immigrants and their offspring. The author points out that Congress alone has the power to prevent great increase of this evil by regulating the immigration of the defective and criminal classes. A well considered and instructive essay.] (Read before the American Public Health Association, at Detroit, Mich., November 15th, 1883.) Pp. 21.

Our Eyes and Our Industries. By B. JOY JEFFRIES, A. M., M. D., (Harvard) Ophthalmic Surgeon Massachusetts Charitable Eye and Ear Infirmary, etc. [This is one of the most interesting papers on ophthalmic subjects we remember ever reading. We would advise all of our readers desiring to be posted in such matters to procure a copy.] (Reprint from the *Fourth Annual Report of the Massachusetts State Board of Health, Lunacy and Charity*.) Pp. 31.

The Treatment of Wounds as Based on Evolutionary Laws. By C. PITTFIELD MITCHELL, M. R. C. S., etc. New York. J. H. Vail & Co. 1883. 8vo. Flexible cloth. Pp. 29. Price, fifty cents. [The title of this little volume fully expresses the contents, which are well worth perusal. Our space prevents any full review of the work, but we can safely recommend its purchase and study to any one interested in the subject.]

The Late Dr. George M. Beard. A Sketch. By A. D. ROCKWELL, M. D. [A short memorial sketch of the distinguished American electrician by his former associate and

friend.] (Read before the American Academy of Medicine, October 4th, 1883.) Pp. 10.

Lister's System of Aseptic Wound-Treatment versus Its Modifications. By B. A. WATSON, A. M., M. D., Surgeon to the Jersey City Charity and St Francis Hospitals, Jersey City, N. J. [A most practical consideration of the best manner of securing early and complete healing of wounds. The writer's own views are ably presented and his citations from the ablest authorities on the subject clear and concise.] (Reprint from the *Transactions of the American Surgical Association*, Vol. I., 1883.) Pp. 17.

Official Correspondence between Surgeon-General Wm. A. Hammond U. S. A., and the Adjutant-General of the Army. [This relates to the fact of Dr. Hammond founding the Army Medical Museum, and inaugurating the Medical and Surgical History of the War, while Surgeon-General in 1862. General Barnes was given the credit of so doing in a general order issued by the department announcing his death, and on Dr. Hammond's appealing to the records for a correction of the statement the circular was altered.] Pp. 8.

Is the Extirpation of the Cancerous Uterus a Justifiable Operation? By A. REEVES JACKSON, A. M., M. D., Professor of Surgical Diseases of Women and Clinical Gynæcology in the College of Physicians and Surgeons of Chicago, etc. [This monograph, although interesting mainly to the specialist, shows evidence of much thought and examination of statistics. The question asked in the title is answered in the negative by the author.] (Reprint from the *Gynæcological Transactions*, Vol. VIII., 1883.) Pp. 17.

Some Recent Progress in Disease of the Nervous System. By TALBOT JONES, M. D., St. Paul, Minn. [A report on advances in nervous diseases read before the Minnesota State Medical Society, 1883.] (Reprint from the *Alienist and Neurologist*, January, 1884.)

The Opium Psycho-Neurosis.—Chronic Meconism or Papaverism. By C. H. HUGHES, M. D., Lecturer on Nervous Diseases, St. Louis Medical College. [Dr. Hughes offers these last two terms as an addition to our medical nomenclature, and proposes to call a victim to this habit a "meconophagist." This study of the pathology and treatment of "papaverism" is fairly good.] (Reprint from the *Alienist and Neurologist*, January, 1884.) Pp. 23.

Bardeland Psychiatric Record.—Prodromal Symptoms of Psychological Impairment. By the same author. [In this little

brochure two very peculiar cases are noted—one of “insanity of touch”—and the other of “verdiphobia,” both very much out of the common way.] (Reprints from the same.) Pp. 7.

Notes on Opium Habit. By ASA P. MEYLERT, M. D., Physician to the Woman's Christian Home, New York City, etc. [We are not acquainted with the local reputation of the author and would hardly wish to judge him by this paper.] (Published by G. P. Putnam's Sons. New York. 1884.) Pp. 36.

Preventable Blindness. By SAMUEL THEOBALD, M. D., Professor of Diseases of the Eye and Ear, in the Baltimore Polyclinic and Post-Graduate Medical School, etc. [A well considered and thoughtful essay upon a very important subject.] (Reprint from the Transactions of the Medical and Chirurgical Faculty of Maryland, 1884.) Pp. 8.

Cryptorchidism. With an Illustrative Case. By ROBERT W. JOHNSON, M. D. [In this excellent short treatise on the abnormality mentioned, the writer presents a statistical table of eighty-nine cases which he has collated, and adds the remarkable instance occurring in his own practice. The affection is so rare that Dr. Johnson has done wisely in placing his case on public record.] (Reprints from the same as above.) Pp. 11.

Excision of the Rectum for Cancer; Operation. By WALTER COLES, M. D., St. Louis, Mo. [The operation in the case mentioned by the author was certainly performed with nicety, and the remarkably rapid recovery of the patient was well deserved.] (Reprint from the *St. Louis Courier of Medicine*, August, 1884.) Pp. 8.

Gun-shot Wounds of the Small Intestines. By CHARLES T. PARKES, M. D., Professor of Anatomy in the Rush Medical College, Chicago, Ill. [When we listened to Dr. Parkes deliver his abstract of this paper before the Surgical Section of the American Medical Association last May, we were struck with the pains he had taken to prepare his address as chairman of his Section, and on a careful reading of the complete paper we must say that his work is worthy of more extended notice than it has yet received. We wish that every one of our readers could see and appreciate this article. It is one of the finest contributions to abdominal surgery that has been produced in this country.] (Reprint from the *Journal of the American Medical Association*, 1884,) Pp. 67. C.

Editorial.

Board of Medical Examiners of the State of Virginia.—It is a general gratification that the Governor of Virginia, Wm. E. Cameron, has approved of each of the nominations of the Medical Society of Virginia made during its recent session. The Board will meet Saturday, November 15th, 1884, in the hall of the Richmond Academy of Medicine. We await the proceedings of this Board with a great deal of anxious interest. There is only one member of the thirty-two doctors composing the Board that is not a Fellow of the Medical Society of Virginia. *That one* is not an "irregular," according to our information.

It needs no suggestion from us, with the composition of the Board, as to what to do. *Do right.* Do not evade the law, on the one hand; do not offend it, on the other. Our "seeking" has been for a Board that cannot be purchased; for a Board that will be unbiassed; for a Board that will do its *duty*. We have no fear that the gentlemen composing the present Board will do less than they think to be their duty.

Hydrochlorate of Cocaine.—This new local anæsthetic promises to revolutionize eye surgery, its effects being most remarkable. It has been used in solution in Vienna during the past year as a means of producing anæsthesia of the pharynx and larynx by its application to those parts with a soft brush or mop, and it was only a few months ago that Dr. Kollar, of that city, presented to the Heidelberg Congress of Ophthalmologists the results obtained by him from its employment in the eye. The drug in solution has the wonderful effect of producing complete insensibility of the eye-ball to operative treatment. Dr. ———, of New York, now visiting Europe, in a letter to the *Medical Record* a few weeks ago, gave the first information of its almost magical powers to the profession in this country, and the New York ophthalmologists at once experimented with it. The results obtained from its use were in each case most excellent, and all who have reported trials of it are enthusiastic over the discovery. As its name implies, it is a salt of the alkaloid prepared from the leaves of the cocoa plant, and as its manufacture is at present very limited, its cost is exceedingly high. We have somewhere seen the statement that it is worth \$4.20

per ounce, \$67.20 per pound. Of course if it proves to be as valuable in practice as is now promised, the price will soon be reduced by competitive manufacture in large quantities. In next months' issue of the *Monthly* our readers will find an excellent article fully describing the drug and its employment.

Dr. Horatio R. Bigelow, of Washington, D. C., author of a standard work on Hydrophobia, etc., sailed a few days ago for Berlin, Germany. Among other studies he goes to examine more closely into the work of Dr. Koch, in relation to microscopical bacilli and microbe examination. One of the closest students in the medical profession of America, his name is well known, not only through the publication of the book above referred to, but from his frequent and practical contributions to the periodical medical literature of the day. In active practice, yet during the past few years he has presented to the profession several interesting and original ideas in medicine, evidently the result of careful study and practical experience. As one of our personal friends we wish him the fullest measure of success in his continental life, and hope to meet him after the lapse of two years in perfect health, with new wealth added to his now-existing store of medical science.

Dr. Moses D. Hoge, Jr.—It will be gratifying to the friends of this estimable gentleman, who is now prosecuting his medical studies at the University of Heidelberg, Germany, to learn that he has been appointed on the Surgical Staff of Professor Czerny. This is a distinguished compliment to our townsman, who secured the position after a competitive examination. He will return to his home in this city sometime during the Summer of 1885.

The Transactions of the Medical Society of Virginia for 1883 has been delayed beyond the ability of the Recording Secretary to get it out sooner than about the middle of December. He has acted under instructions from the Committee on Publications.

Encyclopedia of Medical Wit, Humor and Curiosities of Medicine.—The undersigned proposes to publish during the coming year a large volume under the above or a similar title.

In this undertaking he respectfully solicits the kindly aid of the profession. Witticisms and anecdotes of a humorous,

or curious nature are solicited. There are numberless unpublished experiences that would prove a source of amusement and instruction, and all physicians, druggists, dentists, and others supplying original contributions will receive due credit in the work.

Information regarding suitable literature—home and foreign, ancient and modern—will be gladly received and highly appreciated. The author is especially anxious to avail himself of every source, and would highly appreciate all information concerning publications likely to be useful for reference.

All letters, contributions, clippings, books and other matter should be addressed to JULIUS WISE, M. D. 806 Olive St., St. Louis, Mo.

Dr. Bunn's Uterine Pessary.—It gives us pleasure to publish the following testimonial of this most excellent pessary:

Dear Sir,—I have been using one of your "Ovoid" Pessaries on a case of retroversion of the uterus, of two years standing. She is nearly well and declares that the pessary does not give her the least trouble or pain. It has given *me* as well as the patient entire satisfaction. I cheerfully recommend it to the profession as being *the* pessary, *par excellence*, in all displacements of the uterus.

Wishing you much success, I am, as ever, your friend,
M. C. McINTOSH, Greely, Ark.

Mellier's Buggy Case.—"I am now using Mellier's Standard Buggy Case, and consider it the neatest, most durable, and most convenient that I have ever seen.

C. F. ASKREW, Corydon, Ind."

The Index Medicus ought to be better patronized by the reading and *writing* part of the profession. Its publication office is 31 and 32 Park Row, New York. Each monthly *Index* is compiled under the supervision of Dr. John S. Billings, Surgeon U. S. Army, and Robert Fletcher, M. R. C. S., England. It too often occurs that letters of inquiry are written to Editors asking where such or such a paper occurred that they have simply *heard* of. If authors took *all* the journals in the country, they would often find authorities, either for support or else for discussion that they knew not of. But instead of this, they get a stray point, and they write to some far off editor for specific information, as if he had as much time to search "forgotten lore" as the author

of the proposed book. If writers of articles or of books would subscribe regularly to this *Index Medicus*, which costs \$10. *per annum*, because of its small patronage, the price of that journal would be materially reduced, and the annoyance of Editors, who have nothing to do with what authors write, would be lessened. It seems that to some extent, at least, writers unknown and known to medical literature, appeal to Editors for information as to topics upon which they write. We want to impress upon such that the *Index Medicus* is their better guide.

Medical Students in the United States.—The latest computation that we have seen is that there are about 12,000 at this time. About 10,000 are "regular students; about 1,200 are "homœopathic, some 750 "eclectic" and about 50 "physio-medicals." Fortunately, the Southern States are not cursed by "irregular practitioners" by any great number. We venture the statement that of the *doctors*, licensed to practice, outside of the many cross-roads druggists who seek to make money rather than to do good, or to make reputation beyond a sordid interest, there are not materially over 300 "irregulars" of every class. The Southern States are fortunate in this respect as yet. Let us jealously, as well as zealously, guard our doors. We may say more in explanation of this point at another time. There are about 140 medical colleges, of all "schools," in the United States at this time.

Medical Journalistic Quarrels.—We are continuously noticing new medical journals entering with bitterness into discussions, where the result seems to be only the parrying of words. Such conduct shows inexperience, to say the least of it. Subscribers as a class take less interest in such matters than they do in the discussion of broader issues. Don't assume every man's wrong action to be a cause for personal censure or printed exposure. It is his preacher's duty to call him to mind on such points—if he has no nearer personal friend to advise him. It is only when the doctor, the corporation, the Board, the Faculty, or what not has gone beyond the influence of personal advice of friends that his or their conduct should be exposed.

* When one, as an Editor, begins to use words, let them have no uncertain meaning. But having said *what is to be said*, let the words rest. But we have seen farmers re-plow ground for the purpose of seeding again. If, as journalists, the intention be to "do good and not evil," let us recognize

the right, and pursue it—regardless of friendships or animosities. *Let us strive to do good—to instruct and to benefit.*

Jewish Exemption from Cholera in Europe.—We have seen numerous statements and comments on the remarkable exemption of the Jews as to infections or epidemic diseases, in general. Jew shops or stores are among the latest to close during the raging of a direful scourge. Many of the store keepers have no farm-home, nor country friends to which to send their families. Some of them are too sordid to leave the opportunity, in the towns, to make money. Much in excess of the Christians, *pro rata*, as to the “better class” of the population, they stay at home, and attend to their business during epidemics. A singular result is that they sicken and die in smaller numbers than the Christians. Take the epidemic of cholera in the South of Europe, as an illustration of our statement. It is published that of all the victims of cholera in Toulon, there have been no Jews; in Naples, only a few. Rabbi Weyle says, that of the seven cases among the Jews at Marseilles, five did not observe the Hebrew laws as to hygiene and food. The percentage of death rate among the Jews was .07; whereas, for other inhabitants of Marseilles, the ratio was .33.

There is an important lesson to learn from such statistics.

Specimen Copy Requests, at this season of the year, are always numerous, and very annoying, unless they send the cash or postage letter stamps enough to pay for the copy. How silly it is for one able to pay for it to beg a journal when the begger is better off than the Proprietors. How dishonest it is to impose on them thus, when, in the end, it is not dreamed of to subscribe. All journals ought to put their stamp of indignation on such attempts at fraud. It is a great and a growing imposition. We throw out the suggestion to our exchanges to regularly publish a list of “specimen copy” orderers so as to protect each other against imposition. If no other good comes of it, the journals will soon secure a very good “directory” of medical journal “wishers.” Wait for a season to see whether or not the postal card orderer is heard from in the way of payment for the copy sent him before giving him the “fame” he ought to have. A plan can be worked up for mutual protection. What say our exchanges? We shall watch for notes in the editorial columns.

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Original Communications.

ART. I.—Cocaine Hydrochlorate—the New Local Anæsthetic.

By JAMES LANCELOT MINOR, M. D., Pathologist and Assistant Surgeon
to the New York Eye and Ear Infirmary, New York, N. Y.

It has scarcely been two months since Dr. Koller, a young physician of Vienna, discovered that a solution of cocaine hydrochlorate acted as a local anæsthetic, when applied to the conjunctiva; yet, at this early date, it threatens to revolutionize the practice of ophthalmology, and moreover to make serious inroads in other branches of medicine and surgery.

The New York *Medical Record*, of October 11th, 1884, contained an account of the experiments performed before the Heidelberg Ophthalmological Congress, and in its next issue (October 18th) appeared the first clinical reports of cases operated upon in this country under the influence of the drug. Since that time, its use has been restricted simply by its limited supply; yet the enthusiasm is unabated, and is greatest among those who have used it most extensively.

Cocaine is one of the alkaloids prepared from the South American plant *erythroxylon coca*—familiar to most of us as the *coca*—which is chewed by the natives to enable them to withstand fatigue and hunger, and amongst whom it is held in the highest veneration, some indeed ascribing divine prop-

erties to the plant. Cocaine was first isolated and described by Niemann in 1860. Its chemical composition is much the same as theine, caffeine and theobromene, and, in its physiological effects, it is somewhat similar to these alkaloids.

Cocaine, taken *internally*, does not produce very active effects; but it would seem to belong to the narcotics. Its dose is from gr. $\frac{1}{6}$ to gr. ij. Locally, it acts as an anæsthetic to the part to which it is applied. It acts more efficiently on mucous membranes, because there it is readily absorbed; yet, if time be allowed, or if the epidermis be scraped off, it acts equally well on cutaneous surfaces. *Hypodermically*, it seems, by *rough tests*, to abolish sensation in the parts with which it comes in direct contact—the skin overlying the anæsthetized area retaining its sensibility. More careful tests, however, seem to show that it acts over the whole cutaneous surface, as an anæsthetic, when given hypodermically; and in larger doses, as an exhilarator of the general system; and in larger doses still, it interferes with co-ordination. It causes a very perceptible blanching of mucous membranes; and, in operations about the eye, it lessens the tendency to hæmorrhage. When applied to the conjunctival sac, it produces anæsthesia of the cornea and conjunctiva, which begins to appear in about one minute, and lasts for about 15 or 20 minutes. The anæsthesia seems to be complete for the cornea and conjunctiva, but is only partial, though considerable, for the deeper structures. It causes dilatation of the pupil and slight relaxation of the accommodation. It does not seem to exert much, if any, influence upon the intra-ocular circulation or tension.

Cocaine is not very soluble in water; hence one of its salts—hydrochlorate—is used; and of this, an aqueous solution—two per cent. or four per cent.—is the proper form.

When used for operations upon the eye, two or three drops are instilled into the conjunctival sac. This is repeated two or three times, at intervals of about five minutes, when it will be found that the eye can be handled with impunity; and any operation involving the conjunctiva, sub-conjunctival tissue, or cornea, can be performed without causing the patient a particle of pain. To obtain more complete anæ-

thesia of the iris than simple instillation will produce, I am in the habit of introducing several drops into the anterior chamber, immediately after the cut in the cornea has been made, when an operation involving the iris is intended. And for the same reason, when the muscles are to be operated upon, I inject a few drops over the insertion of the muscle through the conjunctival cut. This is, of course, done in addition to its instillation into the conjunctival sac.

In the number of the *New York Medical Record* referred to, I reported my first two operations under the influence of the new anæsthetic. One of these was the extraction of a senile cataract. Since that time I have used the drug, as above described, in all cases upon which I have operated, and without a single failure. I subjoin brief notes of the most important cases, which will show the basis of our enthusiasm, for my own experience does not differ from that of my confreres in this city:

CASE I. *Extraction of Cataract*.—Male, æt. 60; senile cataract. Speculum introduced; globe grasped with fixation forceps; large upward peripheral corneal section; broad iridectomy; peripheric cystotomy; delivery of lens easy. Operation normal. *No pain*. Assisted by Drs. Ball and Richardson, of Brooklyn, N. Y.

CASE II. *Preliminary Iridectomy with Trituration of Lens* (Förster's).—Male, æt. 55. Immature cataract; lids held apart by speculum and globe steadied with fixation forceps; medium sized upward corneal section; good iridectomy; massage of lens with blunt end of strabismus hook. Operation normal. *No pain*. Assisted by Dr. Colt, of Brooklyn, and Dr. Spencer, of the U. S. Army.

CASE III. *Preliminary Iridectomy with Trituration of Lens* (Förster's).—Immature cataract. Female, æt. 65. Speculum; fixation; upward corneal section; large iridectomy; massage of lens. *No pain*. Operation normal. Assisted by Dr. Flinn, of New York.

CASE IV. *Preliminary Iridectomy with Trituration of Lens* (Förster).—Male, æt. 62. Immature cataract; eye speculum; fixation forceps; corneal section upwards; large iridectomy; massage of lens through coloboma of iris, with blunt end of strabismus hook. Operation normal. *No pain*. Performed at the New York Eye and Ear Infirmary.

CASE V. *Preliminary Iridectomy with Trituration of Lens* (Förster).—Immature cataract. Male, æt. 24. Eye speculum; fixation forceps; upward corneal section; large iridectomy; massage of lens as above. Operation normal. Performed at the New York Eye and Ear Infirmary. *No pain.*

CASE VI. *Tenotomy of Right Internal Rectus Muscle.*—Girl, æt. 6. Convergent strabismus; eye speculum; fixation forceps; conjunctival opening; large lens; tenotomy free. *No pain* until tendon was caught with strabismus hook, and this but slight. Assisted by Dr. Sherman, of New York.

CASE VII. *Tenotomy of Right Internus for Convergent Strabismus.*—Operation as above. *No pain* until tendon was divided, and then but slight. Boy, æt. 10 years. At New York Eye and Ear Infirmary.

CASE VIII.—Girl, æt. 12. *Convergent Strabismus. Tenotomy of Left Internal Rectus Muscle.* *No pain.* New York Eye and Ear Infirmary.

CASE IX.—Boy, æt. 13. *Convergent Strabismus. Tenotomy of Left Internal Rectus Muscle.* *No pain.* New York Eye and Ear Infirmary.

CASE X.—Female, æt. 20. *Chalazion* (cystic tumor) of upper lid. Cocaine instilled; in five minutes three minims of cocaine solution were injected, with a hypodermic needle, in the tissue around the tumor. Three minutes later, the tumor was opened and its contents evacuated through a conjunctival incision, the interior being thoroughly gouged out with a curette. *No pain.* New York Eye and Ear Infirmary.

CASE XI.—Youth, æt. 18. *Gonorrhœal Conjunctivitis.* Cocaine used to relieve the pain due to the inflammation, and to reduce that caused by applications to the lids, both of which it did satisfactorily. The pupil was kept dilated by the cocaine to such an extent that atropine was not resorted to, though it would have been otherwise used.

CASE XII. *Preliminary Iridectomy with Trituration of Lens* (Förster).—Female, æt. 40. Immature cataract. Operation done in the usual way and completed *without pain.* New York Eye and Ear Infirmary.

I have had other cases which, if related, would show the same results as those enumerated above. Enough has been said, however, to indicate the extensive field which has opened to us, and the satisfactory way in which the new anæsthetic acts. Not alone does it act as an anæsthetic, but it lessens hæmorrhage; and, judging from my own experience, it

would seem to lessen re-action and the tendency to inflammation. It renders a trained assistant unnecessary; for the patient himself does all that is required in that direction. (I speak as an ophthalmologist).

I believe that the claims made in the closing sentence of my article in the *Medical Record* of a month ago have been verified: "Should cocaine, in the hands of others, meet with the same success that I have attained, it will mark an era in ophthalmology unsurpassed by any in modern times. Its use in other branches of medicine and surgery may be almost as important as in ophthalmology."

21 *Park Avenue.*

ART. II.—**Muriate of Cocaine—The New Anæsthetic.** By JOHN HERBERT CLAIBORNE, JR., M. D., New York, N. Y.

Since the discovery of ether and chloroform, the medical profession and, indeed, the world at large, have never been so startled and wonder-struck as by the new and truly remarkable discovery of the local anæsthetic—the muriate of cocaine.

In a letter recently written from Germany to the New York *Medical Record*, by one of the most distinguished oculists in this city, mention was made of this new agent, giving its test before the Heidelberg Ophthalmological Congress. A few drops of a watery solution were instilled into the eye of a patient; after ten minutes this was repeated, and, in ten minutes more, the cornea and conjunctiva could be touched with a probe, without the patient evincing any symptom of distress or pain.

As soon as the news of this wonderful agent reached this city and was published, inquiry was immediately made of the leading druggists and chemists as to whether it could be obtained. Owing to its rarity in the market, it was not to be had for several days.

The demands made for it by the oculists in this city became so numerous and urgent, that before many days had elapsed, it could be purchased at several establishments for fifty cents a grain, or \$5,000 a pound. These things, how-

ever, proved no drawback to the zeal and energy of science, and, in a few days, many experiments had been made with it and the results published.

Dr. E. Gruening, of this city, with whom I have the pleasure of being connected professionally, has employed it extensively both in his private practice and in his clinics before the eye class of the New York Polyclinic.

Three drops of a two per cent. watery solution of the drug were instilled into the eyes of his patients every five minutes for fifteen minutes. Five minutes after the last instillation, the operations were performed. He has done, within the last week or ten days, under its anæsthetic influence, two cataracts, three iridectomies, one squint and one pterygium, besides the removal of numerous foreign bodies from the cornea without any expression of pain on the part of the patients.

In the two cataracts and in one iridectomy, there was slight pain as the iris was being drawn out and clipped. In the other two iridectomies, however, there was no pain in *any* of the steps of the operations. In the squint, the patient complained of some pain as the internal rectus was pulled forward and cut. The pterygium, which encroached several lines upon the cornea, was performed absolutely without pain, though the patient vomited, as he himself said, from fright.

Foreign bodies are removed from the cornea without any unpleasant sensations five minutes after the instillation of two drops of a two per cent. solution of the agent.

Only those who have seen such operations performed without anæsthesia, local or general, and have witnessed the terrible suffering incident upon them, can appreciate the beneficent effect of the God-given boon. The perfect freedom and ease with which the operator and the patient can converse while the operation is being performed, savors at once of the ridiculous and the sublime.

The addition of this new agent to science renders still more fascinating the charm and brilliancy of ocular surgery, and removes entirely that ever clinging fear of the possible results of ether and chloroform.

The anæsthetic effect of the drug is not restricted to the

eye, but obtains in all the mucous membranes of the body. Doubtless, as more extensive experimentation is made, it will find a still wider application. Other cases have been reported by oculists in this city, in which equally as brilliant results have been obtained.

Cocaine is the alkaloid of the erythroxylon coca. "It is a small tree, from six to nine feet in height, cultivated in various parts of South America, principally in Peru and Bolivia, Equador, New Grenada and Brazil."

When growing, the leaves are said to resemble the tea plant. The natives of these countries attribute to it divine origin and divine powers, and it is well known that they chew the leaves habitually, and are enabled, by its stimulating effect, to sustain the toils of a long journey with comparatively little food.

The salt itself—muriate of cocaine—is of a grayish white color, and floats on water; has no smell, but a slightly bitter taste. It is soluble in water, and makes a clear solution, with a slightly vegetable and rather pleasant odor and taste. When dropped into the eye, it produces no irritating effect; it dilates the pupil considerably, and slightly diminishes the power of accommodation.

Considering the high price of the article, Dr. Gruening has experimented with one of its sister alkaloids—caffeine—without obtaining, however, any anæsthetic effect. As there are no stable single salts of this alkaloid, the double salts, the benzoate and the salicylate of sodium and caffeine were used.

This note would be incomplete did it fail to give due credit to the young man through whose good fortune or investigation—it has not been definitely stated which—this blessing has been bestowed on the world. The young man in question, whose name is Dr. Koller, of Vienna, still a student, with a modesty and naïveté, certainly not characteristic of the average American, communicated his secret to a continental oculist, and furnished him with a two per cent. solution of the agent, with which he demonstrated its anæsthetic effect to the Ophthalmological Congress at Heidelberg.

ART. III.—**Muriate of Cocaine—The New Local Anæsthetic—Its Use in Eye, Ear and Throat Affections.** By JOSEPH A WHITE, M. D., Senior Surgeon of the Richmond Eye, Ear and Throat Infirmary, etc., Richmond, Va.

When cocaine, the alkaloid of coca (*erythroxylyon coca*), was first extracted from the plant by M. Niemann, it was discovered to have a numbing effect when laid upon the tongue; but this fact was not utilized for some time, nor was any investigation made as to its anæsthetic influence upon mucous surfaces in general until recently. Consequently, when, at the September meeting of the German Ophthalmological Society in Heidelberg, Dr Koller presented his paper upon its wonderful effects in producing anæsthesia of the conjunctiva, etc., it was like the advent of a new star in the heavens to astronomers, and the medical world seems to have gone wild over it. Coca itself has been used therapeutically for some time, and in the form of the "Vin Mariani" has received the endorsement of the best medical men of both continents as a remedy in painful affections of the stomach and throat and in weakness of the vocal organs, acting both as a sedative and tonic.

But the newly discovered property of its alkaloid fills such a needed space in the pharmacy that if it carries out its promise it is one of the greatest and most inestimable remedies in our armamentarium. It is barely sixty days since the above paper was read, and already from every quarter comes reports of its use in place of chloroform or ether for painful operations upon mucous surfaces. We have seen records of its utility in all kinds of eye operations, in removal of growths from the nose, etc., in producing anæsthesia of the pharynx and allowing free laryngeal examination, in dulling sensibility of the vagina, and lastly of its hypodermic administration for removing superficial growths. So far its exact status is not determined, and possibly much of the present enthusiasm may abate when the scope of its usefulness has been definitely settled.

When I saw the first report of its use I ordered a supply

at once, and as soon as it was received, tried to satisfy myself of its value as far as my own special work was concerned.

First, in *eye surgery* I have found it a trusty agent, doing away with the necessity of an anæsthetic in all operations upon the eye-ball and conjunctiva except enucleation. I have used it in performing iridectomy, in removing foreign bodies from the cornea, in slitting up the canaliculus, in probing the lachrymal canal, in cutting tarsal cysts, etc. I have not performed cataract extraction under its influence, but iridectomy is practically the same thing; nor had I sufficient confidence in its anæsthetic effect to subject a patient to an enucleation without chloroform.

In the *iridectomy*, after thrice plentifully dropping a two per cent. solution into the eye at intervals of five minutes, there seemed to be perfect anæsthesia of the cornea and conjunctiva, the blepharostat gave no inconvenience, and there was absolutely no discomfort in the corneal section, but cutting the iris caused the patient to complain slightly.

In *slitting the canaliculus*, the patient complained of pain, but not as much as they usually do. Possibly a stronger solution oftener repeated, say every five minutes, for half hour to an hour, might have entirely done away with the pain.

In *probing the lachrymal canal* in a case of stricture of of years standing, who was exceedingly nervous and who always dreaded the use of the probe, there was comparative comfort after I had injected slowly with the lachrymal syringe a two per cent. solution several times through the canal. In the same case I removed some granular tissue that had sprung up at the upper opening of the canal without any discomfort to the patient. In cases of *foreign bodies on the cornea*, I have found its instillation remove in a few moments all discomfort from the presence of the foreign body, and after its painless removal an absolute immunity from pain. In cases of *corneal ulcer* and *phlyctenulæ* it promises to be of the greatest use, doing away with the pain, and in consequence also ridding the patient, temporarily at least, of the intolerance of light, and allowing free examination and application of remedies. In *strabismus* I have not given it a fair trial, the only case being a little boy who complained

greatly of the blepharostat, although that was probably more from fright than from any real discomfort.

It is in strabismus operations, above all others on the eye, that such a remedy as cocaine is perfectly invaluable, because in cutting the muscle of a squinting eye we should always have the sensible concurrence of the patient immediately or very shortly after the operation to enable us to judge of the effect, and increase or diminish it, as the case may be.

Many a strabismus operation has been imperfect in results or an utter failure because the use of chloroform or ether has prevented the surgeon judging of the effects of his work. I have seen cases where, as a result of the anæsthesia, the patient had lost the co-ordinating power over the eye muscles, especially when they suffered from nausea, and if this continued for days afterwards, as is sometimes the case, they did not recover control of the eye movements until the effect upon the nervous system wore off. Meanwhile the muscle took a new attachment and not always in the desired situation. Therefore, in just such cases the remedy is invaluable, and although it produces itself some defective motion as well as loss of sensation, this wears off very rapidly, and the effect of the tenotomy can be studied and regulated.

In the *ear* I have given it an imperfect trial. In one case of "myringitis" inflammation of the drumhead with some pain, after filling the external meatus with a four per cent. solution, the discomfort disappeared, and I could put my probe on the membrana tympani without producing any other sensation than that of scratching a piece of parchment. In another case of *polypus auris* I filled the ear with the same solution, keeping it there for about fifteen minutes, the patient holding the head reclined upon a table, and then removed the polyp without any more discomfort than a small instrument would produce in the external meatus of a healthy ear. In both these cases the effect wore off in a short time, and in the case of myringitis the pain returned, requiring a second application.

Whether it will prove of practical value in ear troubles cannot be determined by two cases, but I am satisfied that it is reliable in producing anæsthesia of the drumhead, and

that paracentesis of the membrana tympani and such like operative procedures can be performed with its help without giving the pain nearly always bitterly complained of.

In the *pharynx, larynx and nasal cavities* I have used it both for diagnostic and for therapeutical purposes. In one case where I had difficulty of making a laryngeal examination on account of constant gagging, I swabbed the middle and lower part of the pharynx and back of the tongue several times at intervals of five minutes until I could put a probe on the parts without producing retching, and then had a satisfactory examination without any trouble.

In another case of "*laryngeal phthisis*," with pain running from the larynx to the ear, and considerable difficulty and pain in swallowing so as to seriously interfere with nutrition, after carefully cleansing the parts with an alkaline spray, I swabbed the larynx and contiguous structures with a large brush dipped in a four per cent. solution, and had the satisfaction of seeing my patient swallow without any difficulty or pain. The annoying symptoms returned some hours later, but a second application produced a like effect. Although this application is probably not at all curative in effect, and only produces transient results, still it is preferable to morphia in sufflation, which by absorption brings the system under the influence of the narcotic; and it moreover produces a more complete local anæsthetic effect than morphia, thus enabling the sufferer to take nourishment in comparative comfort, and it allows us to make local applications of some curative value without causing pain to the patient. From this standpoint the new drug is of inestimable value if it produces like results in all or the greater number of such cases.

In the *nasal cavity* I have also used it with some considerable satisfaction. In one case of great sensibility of the parts, in a delicate lady who shrank from the use of the probe, after putting a pledget of absorbent cotton saturated with a four per cent. solution in the nostril and leaving it there awhile, the sensibility was so much diminished that the probe was not at all complained of; moreover, the trickling of the fluid backward over the soft palate produced insensibility of the palate, and allowed a free rhinoscopic examination. This

fact observed in the above case I turned to advantage in another case where I had to tie up the palate to use the galvano-cautery in the post-nasal space. I painted the upper pharynx, the back of the tongue, the uvula and soft palate with the solution, and passing it also along the lower nasal meatus into the post-nasal space, and then found the traction of the elastic bands was borne without discomfort or tendency to gag. In a case of *deflection of the septum*, where the cartilaginous portion was bent upon itself in such a way as to resemble a large fibroid growth almost completely occluding the nostril, I applied the muriate of cocaine by cotton pledgets saturated in a four per cent. solution above and below the deflection, wetting them again and again until the parts became anæsthetic, and was then enabled to pass a galvano-cautery snare around the projection and cut through it with the aid of a transfixion needle without any discomfort to the patient until just before the completion of the operation, when he complained of some pain. In shrinking *turbinate hypertrophy* with the galvano cautery, I have found it does away entirely with the attendant discomfort, but even without it the pain of such an operation is not severe, some patients not complaining of it at all.

From the foregoing report of a short and limited experience with this drug, I should say that the promise of the good to be accomplished by its discovery is a great one in operations upon the eye, ear, throat and nose, and I have no doubt it is equally applicable to a large field in minor surgery. Should further experience with its use disprove any of the above statements, or if they have been too precipitate on such a short acquaintance, I will correct such misstatement after a longer trial of the remedy.

Two English physicians were lately prosecuted by the father of a child upon whom they had operated for tracheotomy during an attack of diphtheria. The ground of complaint was that the doctors asked the father to suck out the tracheotomy tube in his child's trachea without warning him of the danger. The court decided that the medical men were fully justified in making the request. The medical profession paid all the expenses of the doctors.

ART. IV.—The Importance of Uterine Treatment in many Nervous and Mental Diseases, and the Relation of Nervous and Mental Diseases of Women to Uterine Diseases.

By EDWARD C. MANN, M. D., New York, N. Y., Member of Medical Society of the County of New York, Superintendent Sunnyside Private Hospital for Nervous and Mental Disease, Inebriety, and the Opium Habit, Brooklyn, etc., etc.

The disease which I shall discuss is one with which every physician must be familiar, as it is one of the most common to which women are subject and with which neurologists frequently meet. It is so intimately connected with many conditions and changes, that I find it impossible to isolate the subject, and hope the profession will pardon me if, in my attempts at its elucidation, I deem it necessary to speak of other diseases, which might very properly be considered separately.

Irritation, displacements and ulceration of the generative organs were recognized many hundreds of years ago; but modern pathology has lately made rapid strides in the management of uterine diseases, and principally by finding out means and methods by which we can detect and diagnosticate those affections. What we still wish and require in actual practice is greater advance in our diagnostic means. Although every tyro in the profession, armed with a speculum and *lapis infernalis*, thinks himself abundantly able to cope with all the ills to which woman is heir, I hope it will not be profitless for us to attempt to unravel some of the difficulties which we may have met with while treating these very frequent diseases from our standpoint of therapeutics.

The expectation that from the experience of my learned confreres we may gather much practical information, prompts me to present a subject which has occupied much of my professional labors in connection with my specialty as a neurologist, and which from its frequent importance must have engaged the attention of every member of the profession. In fact, although we hear gentlemen assert that they never have had any difficulty in treating uterine irritation and ulcerations of the cervix uteri, and declare that they invariably cure their patients, I believe that there is much still to be learned in connection with this sometimes intractable malady which

so injuriously affects the nervous system of women. There are so many conditions that modify, so many peculiarities of constitution, temperament and disposition that affect the treatment, and the symptoms vary so materially even with similar local lesion, that, to meet all the indications, and successfully combat all the difficulties which we confront, requires much discretion, sound judgment and practical experience.

The frequency of affections of the neck of the womb, and the consecutive influence which these affections exert upon the whole organism, the different forms of irritation and ulceration, and the different methods of treatment required, render an attentive study of the subject necessary. This is the more apparent when we consider the great variations in size and length of the cervix uteri which we find in different females, a fact which must necessarily be taken into consideration if we wish to appreciate the existence or non-existence of hypertrophy, or morbidly increased volume of the organ.

The apparent length of the cervix is very variable, occasioned principally by the implantation of the vagina at different heights on the cervix. We find, in some females, the cervix of but a few lines in length, while, in others, it is an inch or more. Indeed, these physiological variations are so great that were we to be guided by size alone, as appreciated by the touch or the speculum, we should often be misled, and induced to suppose that disease existed when it did not.

In reality, there is no precise rule as to size. The cervix may be voluminous, and yet perfectly healthy; and when this is the case, there is entire freedom from uneasy sensations—whatever its size, shape, or direction. The uterine neck may be considered healthy if it is free from inflammation, irritation, or induration, if the os is normal, and if the cervical cavity is in a normal state. Then the size and condition of the virgin womb is very different from that of a woman who has borne children. In the latter, the condition of the os is materially changed. Instead of finding a small, round, slight impression, as is the case in the virgin,

we generally find a transverse opening, sometimes very irregular, lobulated, and of considerable size.

The disease (irritation and ulceration) also occurs in pregnant women, as also in elderly females, when new complications must necessarily arise sufficient to call forth our utmost energy and experience, in order to combat them successfully. If we would comprehend fully any case which may be presented, we must constantly bear in mind the healthy or normal condition, in which, on being pressed by the finger, we find the cervix uteri perfectly soft and smooth, with no resistance nor hardness, indicating condensation of tissue. The surface is "unctuous" to the touch, as some writers term it, and there is a degree of elasticity about it which will suggest the presence or absence of local congestion. These and many more facts, which I will not mention, are extremely necessary to be borne in mind, if we wish to make a correct diagnosis of this common disease.

Every practitioner who has seen anything of this disease must have been annoyed by the complication of syphiloides, perhaps at first unsuspected; and it is after a long period of treatment during which he is puzzled to know why the ulceration does not disappear, when the secondary eruptions begin to make their appearance, and this whole matter is illuminated. These are important facts to be borne in mind, and our curative means when directed to the *complication* will often confirm our diagnosis by curing the disease.

Diseases of this part of the body do not essentially differ in their principles of pathology and treatment from diseases of other special organs, except as they may be influenced by the natural or physiological operations peculiar to the generative organism, and thus we find the cervix uteri liable to congestion, inflammation, carcinoma, eruptive diseases, etc., like other parts of the human frame. That there are morbid states and actions peculiar to the uterus, I shall not attempt to deny; but, I think, after a careful investigation, we may safely infer that its diseases are generically the same as the diseases of other organs, and their treatment does not materially differ. For example, an attack of acute inflammation of the uterus, or a chronic ulcer of the cervix, we

treat, and expect to cure, as we would treat an acute inflammation or chronic ulcer of the cornea, or of any other part of the body, and look for good results. In fact, one may use lotions or apply dressings to an ulcer of the cervix uteri with as much certainty and precision as if he applied them to an ulcer on the external surface of the body.

It will perhaps be well for us, for a moment, to consider another fact with which all of us must have become familiar, while diagnosing diseases of the uterus, namely, that identically the same pathological affection does not always affect, precisely in the same way, the functions or dynamic symptoms of the uterus and adjacent organs.

I will, by no means, assert that this is not the case with many parts of the human body; but it seems to me, that we see more of this irregularity in connection with uterine diseases than we do with any other affection. The natural states of sensation of the uterus and its appendages may also be altered and perverted. They may be decreased, but this is rare. Far more frequently they are increased to a degree amounting to actual pain; and the pain may appear under very different modifications. The most malignant organic diseases of the uterus may long remain occult and latent in their character; they may have marched far on to a fatal termination, without a single dynamic symptom being present calculated to warn the patient as to any knowledge of her danger. But, on the contrary, we have often severe local and constitutional dynamic symptoms of uterine disease developed, and developed early, in instances of slight and remedial organic affections of the organs, as shown in simple chronic ulceration and inflammatory eruptions upon the cervix. And, again, mark this other perplexing fact—in other instances, all, or almost all these dynamic symptoms may be present in their most aggravated forms for months, and even for years, in instances of the so-called irritable uterus, or in neuralgia of the organ; that is to say, in a set of cases where there is actually no organic disease at all, and where there may be much real distress, but not much real danger.

Hence I think we are warranted in saying that there is no

practical guiding relation between the kind or amount of uterine disease that may be present, and the character of the secondary dynamic symptoms to which it gives rise, and, therefore, we cannot, in practice, depend for the discrimination of the different diseases of the uterus from each other upon the dynamic or functional symptoms. Consequently, as I have intimated, if we would progress in the treatment of uterine diseases we must advance our means of diagnosis. The principles of treatment do not materially vary from what they were many years since; but the great advance in medical science has been in the establishing of facts in connection with symptoms, and in the application of principles of practice, long known, to combat these indications.

There are few diseases that affect the nervous system to the same extent as do those of the womb. Every part of the diseased female seems liable to derangement, and if our attention is directed to these symptoms alone, we would have enough to engage our time, yet with but little profit. This disturbance of the nervous system may easily be accounted for if we consider the relation of this organ to the general system; for we must remember that the uterus is supplied with nerves from the ganglionic and cerebro-spinal system; and therefore it is in relation with every part of the body indirectly, at least, and with every organ that is supplied from the same source.

Thus, we may also account for the importance of attending to the general health, if we would have the cure of uterine diseases permanent. The whole nervous organism may become weakened and super-sensitive in patients suffering under any protracted, and, especially, under any weakening form of uterine disease. There is excitability of mind, and, at the same time, langor and not the usual capacity for mental effort. Not unfrequently we see sad evidence of the effects of uterine irritation upon the mind in the production of puerperal insanity. It is not uncommon to see, in insane asylums, cases resulting from, or combined with, uterine irritation. Local paralysis seems sometimes to occur from the irritation of uterine disease, in the same way as it is seen to occur from the irritation of pregnancy. The power of

standing and walking is not unfrequently interfered with, and I have often seen a person who was entirely unable to stand, immediately upon the replacement of the womb to its normal position, get up and walk.

Space will not permit me to dwell long on any of these interesting concomitant consequences of irregularities of uterine cervical irritations and ulceration. I beg leave, incidentally, merely to glance at them in order that gentlemen of larger experience than myself may elaborate these subjects, and thereby add to our positive knowledge.

Let us briefly consider some of the *causes* of these troubles.

Ulceration of the cervix, like induration, is always preceded by irritation and inflammation of the part. If we wish to investigate the cause of ulceration, we must necessarily inquire what caused the preceding irritation and inflammation.

There are few causes, perhaps, more active in the production of this form of ulceration than the various circumstances connected with child-bearing. Hence, we frequently hear a patient say, that she was perfectly well up to the time of bearing her offspring, and that it was about six weeks after the birth of her infant that she first recognized the pains, discharge, etc., of which she complains. It is, therefore, legitimate to infer that the ulceration is the consequence of the parturition.

In a rapid confinement, when the child is propelled with great force through a contracted or indurated cervix, or imperfectly dilated os, it is very likely to lacerate the cervix, under circumstances otherwise favorable. These injuries, in the majority of women, disappear promptly; cicatrization takes place with rapidity under the influence of the suppurative phlegmasia which sets up after delivery. But if this physiological inflammation of the uterus should be interfered with by such things as cold applications, or be prolonged so as to assume a pathological character; or if a portion of the membranes or placenta be retained, giving rise to irritation—either by presence or by the acrid discharge caused by decomposition, the mucous membrane, instead of

healing, will almost inevitably become the seat of inflammation and of subsequent ulceration.

Married women, who have had children, and who have escaped the dangers of childbirth, are not only exposed subsequently to all the various causes of inflammation which have been already enumerated, but are more liable to their operation than virgins, or than women who have never conceived. The uterus of a woman who has borne children, as long as menstruation lasts, never returns entirely to the size which it presented previous to conception: It is rather larger, rather more vascular, and is endowed with greater vitality; consequently, it is more liable to inflammatory disease. Thence it is, also, that in metritis, unconnected with pregnancy, the body of the uterus enlarges more in women who have borne children than in those who have not.

This remark applies even more to the cervix uteri than to the body of the organ. The more vitilized state of the cervix in women who have conceived, accounts also for induration and hypertrophy being more frequently a concomitant and a result of inflammation and ulceration in them than in women who have never been pregnant. This is a highly interesting fact, as the changes in the intimate structure of the cervix which constitute hypertrophy form a most important feature in the history of the disease whenever they are present.

Although in other parts of the economy, long continued congestion is the most powerful predisposing cause of inflammation, we can scarcely look upon the condition that precedes, accompanies, and follows the menstrual secretion as predisposing to inflammation of the cervix uteri, so long as it remains strictly within physiological limits. It is, strictly speaking, an element of natural function. Unfortunately, however, the congestion of menstruation is not always confined to this boundary. In all, the menstrual secretion is liable to be prevented, diminished, increased or suddenly arrested by a host of mental, social or pathological causes; and whenever this is the case the physiological congestion becomes morbid, and thus gives rise to inflammation. In fact, with some females, the menstrual period even from its commencement instead of being confined to a healthy physiological

congestion, is always accompanied with great pain and fullness, and may justly be considered abnormal. This may be owing to a stricture of the canal leading from the interior of the organ, or may be from excessive congestion, caused by cold during the period of congestion.

In some females, the uterine system seems so extremely sensitive that inflammation follows intercourse immediately, even when the bounds of discretion have not been overstepped. A lady now under my treatment informs me that when she was first married, and for sometime afterwards, every attempt of her husband to have intercourse produced violent convulsions, so that she remained insensible for a half hour or more, and it was exceeding mortifying when she recovered to find the household gathered about her bed administering restoratives. This condition gradually passed away, but left her with chronic ulceration of the cervix uteri.

In connection with this part of our subject I might mention the vaginismus, which is attributable to this excessive nervous irritability. A lady came under my care about a year since who had been married over six months without having had full connection. Upon an attempt to make an examination by touch, I found it almost impossible. Not only the hymen, but the whole vaginal walls seemed turgescient and extremely sensitive. The circular fibres contracted with great force, and it was only after considerable effort that I succeeded, while her husband soothed and held her in order to help me to introduce a single finger. We may easily imagine how such a condition might lead to inflammation, and thus to ulceration of the cervix, which was the case in this instance.

The sexual excitement is much greater in one woman than in another, and it is not surprising that a young woman, brought into the constant companionship of her lover, may have produced a morbid congestion, inflammation and, subsequently, ulceration of the generative organs. In fact, we constantly meet with cases of this character. I will not say that they were not previously predisposed to uterine disease; but, in many instances I could trace the disease to no other cause. This condition is also stated to be very common

among those who indulge in excessive coitus. Masturbation is another cause which we will do well to bear in mind. Indulging freely in venereal excess while menstruating—when the womb is more than usually sensitive and congested and easily injured—the mucous membrane is easily abraded or eroded, and give rise to the lesion in question.*

Owing to the operation of such causes, many young females are attacked with inflammation and ulceration of the cervix uteri within a few days or weeks after marriage, and when such is the case they mostly remain sterile. If they do conceive, successive abortions or miscarriages generally take place. I have known cases where inflammation was produced by endeavors to introduce knitting needles, quills or other substances into the womb in order to produce a miscarriage. Diphtheria is another cause of ulceration which, although it really does sometimes occur, requires a specific treatment.

The cause of irritation and of ulceration of the cervix may be classed under the two heads of *predisposing* and *exciting*. I shall not enumerate all of the many causes liable to produce these conditions, but the one which, by many practitioners is considered the cause, *par excellence*, and without which ulceration of the cervix is nothing more than one or another of the displacements of the womb.

I am not prepared to deny that displacements do cause ulceration of the os and cervix uteri, and that they materially complicate the female nervous diseases to which this paper makes special reference. But I am inclined to think that displacement of the womb is alone caused by ulceration and the concomitant congestion and debility. We see that, immediately upon the cure of the ulcerous condition and the consequent congestion, we have no difficulty in retaining the organ *in situ*. Still, there may be conditions of the female that render her peculiarly liable to displacement of the uterus other than those we have enumerated, as, for example,

*To say the least of the indulgence of marital, self-indulgence "on the part of the husband, when his wife has her menstrual periods" upon her, would be to say that it is *doggishly* brutal. Comparative physiology does not come into question in such a matter. Doctors should frown upon such indulgence on the part of husbands.—*Editors*.

great mental depression, long continued sickness, excessive exertion or bodily fatigue, improper diet, luxurious or indolent habits, and other causes. Such influences would act upon her delicate system and would naturally induce debility. Then, upon some sudden effort, this mobile organ might easily be displaced, and from attrition upon the walls of the vagina, or the irritation consequent upon constipation, or perhaps the twisting or bending of the blood vessels, might interfere with the natural flow of the blood, causing a stasis, and consequent enlargement or congestion, which, as we have before intimated, may easily proceed to ulceration.

Another cause of displacement is the result of intercourse. In some women, as we have before explained, the uterus is situated very low in the vagina. During the act of coitus it is thrust upwards and backwards. This change of position, which constitutes retroversion of the neck of the uterus, is so commonly met with in married females suffering from inflammatory induration, as to constitute nearly the rule. With them, it is evidently to a great extent the result of intercourse. When such displacements occur we may readily account for the subsequent ulceration. But, as I have said, in substance, this is not always the cause of ulceration, but the latter is caused and kept up by the enlargement, followed by relaxation and debility, which was caused by the ulceration.

Prolapsus of the cervix, as I have fully explained, is nearly always the result of its inflammation and enlargement, and not, as generally supposed, due to the laxity of the ligaments of the womb. As a natural result, all attempts to remedy the prolapsus, and to keep the uterus in its natural position, by pessaries and other mechanical contrivances, are not only irrational, but injurious, as long as the inflammatory cause persists. Pessaries, it is true, whilst applied, keep up the uterus; but in doing so they aggravate the disease which occasions the prolapsus; their presence greatly irritates the inflamed tissues. The continued dilatation of the vagina, also, with which the retention of a pessary is attended by dilating the vaginal canal and destroying what little of its natural *contractility* inflammation has left, deprives the neck

of the uterus of a very powerful and natural support. I am word, I have no hesitation in asserting, that in forty-nine cases out of fifty in which pessaries are now employed, the patient is absolutely injured instead of benefitted by them.

The rational treatment of partial prolapsus is, after ascertaining the real nature and extent of the inflammatory disease which occasions it, to treat the cause as well as support the uterus.

Symptoms.—From what has preceded, I think we are prepared to expect that the symptoms of irritation and of ulcer of the os and cervix uteri will vary very materially. Depending upon an infinite variety of conditions and causes, we would naturally anticipate a somewhat corresponding variety of symptoms. We may divide them into local, and constitutional or nervous.

Let us first speak of the general or constitutional and nervous derangements. These are not peculiar to irritation and ulceration of the cervix, but may be looked for in all the diseases of the generative organs, and, therefore, are not important except as they direct our attention to the proper source of the general disturbance. These will be severe or light in proportion to the seriousness of the local lesion or the contrary, and in proportion to the *chronicity* of the disease, and also in accordance with the temperament, constitution and habits of the patient.

I cannot, in this paper, consider all of the constitutional complications—neither are they of sufficient importance for us to enter upon the discussion of them in detail. We will mention only a few of the most prominent.

The one to which our attention will be first called is *pain*. There are several localities, in one or other of which the patient is almost sure to suffer. I will endeavor to enumerate them in the order of their frequency.

There is, in most cases, pain in the back at the sacro-lumbar junction. This pain proceeds over the crest of the ilium, is particularly severe in the region of the ovaries, extends down the inguinal sulcus, and, accompanying the tract of the great nerves and blood vessels, is generally lost in the popliteal space. If pressure is made along this track, the

pain is materially increased. There is a general sense of lassitude and weakness and, occasionally, a feeling of weight in the pelvis, and a certain sense of bearing down, accompanied with a sense of dragging, extending down the thighs, increased by standing or walking. Some patients complain of pain in the side upon the least exertion, in the region of the stomach, in the chest, and underneath the left breast, in the region of the heart; and we often have patients insist that they have disease of the heart because of this pain and palpitation. At times, the patient can scarcely bear the pressure of her corsets. These latter symptoms, or most of them, are probably depending upon the dyspeptic derangement; for when the functions of the stomach are not modified by the uterine inflammation they are scarcely even observed. Occasionally a pain is felt at the point of the coccyx, called *coccydynia*. Excessive distress in the head is not uncommon (generally located at the top of the head), and a pain situated in the region of the glutei muscles has been in several of my patients most severe and persistent. At first, the health of the female is scarcely affected; but, by degrees, the appetite declines, the bowels become irregular, distant and wandering pains are experienced, and the patient, gradually falling into delicate health, may, indeed, thus become liable to serious disease.

Anatomists have determined that the uterus is freely supplied with nerves which belong principally to the sympathetic system, and, as a necessary consequence, the uterus is seldom diseased without the functions of the various organs of animal life being disarranged. This is due to functional exaltation of the primary ganglia of the centric nervous system and to disturbed vaso-motor action. This fact may be said to be the key stone to the constitutional reactions of the malady under consideration.

In almost all cases, the patient suffers from leucorrhœa—more or less profuse. Sometimes the discharge is white like milk; in others it is yellowish; again it is streaked with blood or is of a brownish color. This discharge occurs more especially after any effort or exertion, or after intercourse; but it may take place at intervals, without any ap-

preciable cause. Generally speaking, during the interval of menstruation there is only a slight occasional discharge—the blood being always modified with the other secretions. Occasionally, however, pure blood escapes, and now and then severe hæmorrhage may take place, and then discharges may be so excessive as to endanger the life of the patient.

Most authors on female diseases have mentioned the coincidence between leucorrhœa and dyspepsia, after erroneously accounting for the former by the latter affection. We cannot deny that dyspepsia, by debilitating the economy, may render any part more liable to disease; but it is absurd to attribute local disease of the uterus *alone* to the dyspepsia. It is more rational to infer that the derangement of the digestive organs is dependent upon the sympathetic re-action on the stomach and digestive organs, from the inflammatory disease of the uterus, in the majority of cases, as the real cause of the leucorrhœal discharge. There are few symptoms more generally present than disturbance of the digestive organs. Indeed, a nervous dyspepsia frequently assumes such an intensity as to entirely obscure all other symptoms, thus completely misleading both the patient and her medical adviser, with reference to the real nature of her sufferings.

As a result of the gastric disturbance, we generally find the tongue covered with a white or yellowish fur, parched and dry in the morning. Nausea is not uncommon, and I have frequently seen a woman who had been treated for inflammation of the stomach, or “bilious vomiting”—a favorite term with some practitioners—for several days until she was completely exhausted, immediately relieved by replacing the uterus and by applying a sedative to the inflamed os.

It may very properly be asked how are we to determine whether persistent nausea and vomiting is caused by disease of the stomach, or whether it is nervous and sympathetic with disease of the uterus? We must bear in mind other symptoms which are usually present in disease of the gastric organ, such as pain upon pressure, fever and other distresses, of which it is not our purpose to speak at this time; but when these indications are absent, and evident derangement

of the uterine system exists, the cause of the nausea cannot be doubtful.

As we might expect, in connection with these dyspeptic cases, we will almost certainly find derangement of the renal organs. The state of the urine is often a much more delicate test of the integrity of the digestive functions than the more prominent derangement of the stomach and intestines.

Occasionally we meet with patients who have evidently been suffering from irritation, inflammation or ulceration of the cervix for years; and yet their strength and general nutrition are but slightly impaired—the effect depending much upon the original constitution. The robust person will resist much longer the morbid sympathetic influence.

Nervous Symptoms.—We are not surprised to find that the diseased condition, under consideration, also re-acts on the cerebral and spinal nervous systems, producing intense headache, great depression, groundless terror, and not unfrequently hallucinations and delusions. A remarkable feature in all these mental derangements is that they are increased during *menstruation*. This would naturally cause us to look to the condition of the generative organs. Hysteria, although not regarded as a uterine affection, is, nevertheless, by its re-action on the cerebro-spinal system, often an exciting cause of hysteria, sometimes causing insanity.

We might speak of many other concomitants, such as sterility, uterine inertia, or the diminution or absence of sexual appetite, swollen breasts, enlargements of the sebaceous glands, etc., as caused by uterine ulcerations.

Let us, for a moment, consider the local symptoms. These are much more important, in a diagnostic point of view, than those before considered. Under this head, we will include also the derangements of the adjoining organs, viz.: The bladder, rectum and external parts, which are caused by ulceration of the cervix uteri. When the os or cervix is ulcerated, we frequently find the organ tender upon external pressure, but this is not invariably the case. Pressure upon the neck and body of the uterus almost always produces pain, and if you are not positive from the other symptoms

present, if you will carefully press upon the sides of the cervix, if there is an ulcer present, the spot will be tender and sore to the touch. If, besides, you find a distinct depression or an open os uteri, with muco-purulent matter issuing therefrom, you may rely upon the correctness of your diagnosis. The pain in the womb may be exquisite or simply dull and aching. At times, every stool that the female is obliged to have is almost unendurable, so that she will cry out with pain. I have known patients purposely go for a week or more without having a passage from the intestines, because they dreaded having an action so much.

Then, the os loses its unctuous feel. If the ulceration has extended to the os, it may be soft and velvety to the touch, if their granulations are present. If it is simply an erosion, it will be necessary to use the speculum, unless the doctor has great experience, and sometimes we must pass a pledget of absorbent cotton, or possibly the nitrite of silver over its surface in order to discover its line of demarcation. The os and cervix will be more or less enlarged, sometimes enormously so; but this will depend upon the stage and length of time which the lesion has continued; again it may be indurated, hard or irregular, as well as enlarged.

Upon examination, *per speculum*, the ulcer may be found confined to the os, either to one side, or surrounding the entire entrance to the cervical canal, or it may entirely cover the os and perhaps extend up the canal as far as you can see.

When the simple ulcer has continued for sometime or when from deleterious causes, it is transformed into a deep ulceration, we will find developed numerous vegetations, varying in size from the smallest point to that of a hemp-seed, close together—sometimes loosely separated from each other. They consist of the papillæ of the mucous membrane highly developed, giving a granular appearance to the surface, and they have, accordingly, when agminated, been designated as “the granular ulcer.” It is generally of a livid, red color; the discharge from this surface is considerable, of muco-purulent matter of a grey or creamy color, and frequently streaked with blood. If the ulcer extends into the cervical cavity, involving the Nabothian follicles, a thick,

ropy, tenacious discharge, characteristic of this location will accompany the external discharge spoken of. If a pledget of lint is passed over the surface of the ulceration it readily bleeds. These ulcerations aggravate the congested condition of the uterus, and thus favor the alterations of tissue which accompany the chronic forms of ulceration, and are apt to degenerate still further. The constitutional and nervous symptoms are generally prominent, and symptoms of anæmia early show themselves. Granular ulcerations of the cervix uteri are extremely difficult to cure and are, therefore, distinguished by the obstinacy with which they resist the different agents used against them.

As before intimated, if neglected, and the deleterious influences of uncleanness, venereal excess, indolent habits, etc., be continued, this form of granulation becomes more luxuriant. Upon the old granulation, new excrescences form, sometimes several lines in height, exceedingly vascular, and partaking of the characteristics of the foundation granules. The discharge is immensely increased; copious hæmorrhages are frequent upon the least exertion or the use of the vaginal syringe, and connection is, of course, out of the question. The surface of the body presents that peculiar waxy hue so characteristic of anæmia, and if the disease is not relieved the health of the patient soon succumbs.

Another form of ulceration sometimes occurs, the name of which reveals not only the character of the ulcer but also suggests the cause. *Varicose ulceration* is one of the forms which we have most rarely observed.

Again, the ulcerations may assume a follicular form, extending down the vagina even to the vulva, giving rise to a very distressing symptom, viz.:—intolerable itching. We are aware that this itching has generally been described as a distinct disease, under the name of “pruritus vulvæ,” and, in some instances, it undoubtedly is so; but, in the majority of cases, we will find it connected with irritation or ulceration of the internal organ, and perhaps this fact will account for its well known intractability to treatment. When the cutaneous surface of the labia majora is affected, the itching is often perfectly agonizing, rendering sleep impossible and

frequently the patient becomes almost frantic, rubbing the parts until they are *abraded*. Under these circumstances, the skin and mucous membrane presents a speckled appearance, caused by the enlarged follicles. We may add that this form of disease seldom gives way unless the uterine affection is cured.

When the cervix is ulcerated, sexual intercourse is often painful, and, at times, it is followed by a slight hæmorrhage. The neck of the uterus cannot long be inflamed and congested without extending more or less to the vagina, and it will partake of the hue of the inflamed uterus.

There is a physiological congestion before and after menstruation which must not be considered a diseased state. The proof is that it disappears after the cause has passed away.

It is almost impossible for either the bladder, uterus or rectum to be long inflamed without involving the adjacent organ. This may be accounted for by *this* juxtaposition and the connection of the vascular and nervous systems of each. We accordingly find the disturbance of the bladder and the rectum to be constant sources of annoyance and distress during the progress of uterine ulceration. Add to this the complication above mentioned, viz. :—the acrid deposit and condition of the urine, together with the excessive pain caused by the passage of hardened fæces, and we cannot wonder that these poor creatures long to die rather than endure a life of such torment. Hæmorrhoids and prolapsus ani are not infrequent complications of the disease we are now considering owing to the causes above enumerated.

I have purposely avoided the consideration of malignant or other lesions, which are not immediately connected with the common irritations and ulcerations of the cervix and os uteri. Although the subject is one of great interest, it would extend this paper far beyond its present limits which has grown much greater than was first intended. It would also doubtless be profitable, did space permit, to enlarge on the disturbances of the adjacent organs, how the different versions of the uterus affect the bladder and influence the condition of the rectum; and as these are frequent attendants upon uterine irritation, ulceration and congestion, causing

irritation, stricture, hæmorrhoids, etc., they might be legitimately included; but we must hasten on.

We must not conclude this sketch of local symptoms without mentioning hypertrophy of the neck. (Hypertrophic elongation is said by Skene to be often mistaken for prolapsus.) It is surprising to what an immense size the organ sometimes attains.

One of the first effects of ulceration, and generally preceding the lesion of the parts, is congestion and swelling of the central *structures* of the uterine neck. At first, it remains soft and elastic. This may long continue with little change; but generally this is not the case. The central tissues are not only congested but inflamed; effusion of plastic lymph takes place in their structure, and becomes more and more organized—not only enlarged but indurated—and thus, the process continued, there is no end or limit to which the diseased structure may not grow. The hypertrophy, in its turn, becomes a source of irritation, increasing the original disease and *vice versa*.

Many nervous invalids have the above as the sole cause for their neurasthenia, hysteria, and mental excitement. Alienists and neurologists too often neglect to even make a physical examination, and the poor patient goes from one neurologist to another all over the country, until at last she is perhaps beyond cure when the local cause is finally discovered by a gynæcologist. I must apologize for having trespassed on the field of the gynæcologists; yet they will doubtless find I have made some mistakes in nomenclature, etc. But the great point I wish to insist upon is the thorough examination of many invalids as to the existence of uterine disease which, in my practice, has in females been at the foundation of so many of their nervous troubles, and while we have such men as Emmet, Bozeman, Lee, Mundé, Goodell and Parvin, etc., in our midst to refer our cases to, it seems entirely inexcusable not to have the case thoroughly examined.

In the country it may be difficult, but not so in the city, and I have frequently had cases make a rapid cure who had been nervous invalids for years, simply because I investigated the case thoroughly.

Finally I would say that, in making applications to the mucous membrane lining the canal of the cervix and also to the mucous membrane lining the cavity of the uterus, in my opinion great injury to the nervous system of women often results by too irritant and caustic applications, particularly when the lining mucous membrane is denuded of its epithelium as it often is. The same amount of care is not paid to the treatment of the diseased mucous membrane in these localities as is devoted to the treatment of the mucous membrane of the eye, mouth, nose, rectum or bladder. The danger of too powerful agents in producing an irritant effect on the nervous system is often, I think, ignored. The utmost care and caution and the use of mild applications is, I deem, a necessity in treating any woman whose nervous system completely overbalances her physique.

In treating ulcer of the cervix or other cervical trouble, after a proper dilatation of the cervical canal and a thorough cleansing of the mucous membrane of any secretion, the remedy to be used should be carried fairly into contact with the lining mucous membrane of the cervical canal. This may be done most effectually by the ~~lith~~ tube devised by the late Prof. E. R. Peaslee, of New York. It is one and three-fourths inches long, and three-eighths of an inch in diameter, with three fenestrae, each including one-fifth of its circumference, extending from the *collar* one and a quarter inch towards its cervical extremity. Being introduced after a proper dilatation of the cervical canal, the medicament may be applied to three-fifths of the entire lining membrane of the cervical canal; when, rotating the tube sixty degrees, the rest of it is uncovered and receives the application in its turn.

The tincture of iodine, in recent cases, should be used, in making solutions, as Dr. Peaslee used it, at first of the strength of one drachm to one ounce of water, then two drachms to one ounce of water, and so on up to the full strength, if required; while in cases of long standing it may be used at first with an equal quantity of water. The applications may be repeated in from four to seven days, or less frequently, according to their strength and effects.

The sulphate of zinc, alum, tannic acid and sulphate of copper and nitrate of silver may also be used, beginning with grains, five to the ounce of water, and gradually increasing the strength. The tannate of glycerine, from one scruple to one drachm of tannic acid to one ounce of glycerine; iodine (Churchill's) one-half drachm to one ounce of glycerine, and chloride of zinc, five grains to one ounce of glycerine, are all of them good applications. Chromic acid is rarely required and should never be used stronger than one part of acid to ten parts of water. It is only very rebellious cases that require the strong solutions. When the membrane of the cervical canal is too sensitive to admit of even these applications, or becomes too sensitive from a too strong application, we have used successfully, by Dr. Peaslee's recommendation, given some years ago, an application of Majendie's solution with an equal quantity of water, and also a saturated solution of the chlorate of potassa. We have also found Dr. Peaslee's plan of dilating the cervical canal with his steel dilators of his own devising much more useful than sponge tents. There are five dilators in the set, ranging from one-eighth to five-sixteenths of an inch in diameter. Each is guarded by a bulb, one and three-quarter inches from its point, so that it can pass only that distance into the uterus and therefore project only from one-quarter to one-half inch into its proper cavity, their object being solely to dilate the cervical canal without any needless intrusion into the cavity. The patient lying on her back with the feet drawn up, the dilator should be passed along the left index finger, without recourse to the speculum. If the cervix is quite yielding, the full amount of dilatation may often be effected at one visit in from ten to twenty minutes. If more resistant, two visits may be required on two consecutive days. If quite resistant, the Nos. 1, 2 and 3 may be used and then a sponge tent be introduced to complete the dilatation within the next twenty-four hours. If much pain is produced, remove the instrument and repeat the attempt two days later.

We cannot have an isolated pathology of the ovaries or uterus. The nervous centres suffer in sympathy with the whole body through the agency of the sympathetic or gangli-

onic nervous system. The cerebro-spinal nerves, which are branches of the sacral plexus, take their origin from the neighborhood of the third and fourth lumbar vertebræ. The uterine fibres of the sympathetic, coming from the aortic plexus, take their spinal origin at the level of the last dorsal vertebra. The uterus also contains a large number of ganglia, mostly confined to the lower part. The spinal cord is capable of exciting, on irritation, the contractions of the uterus and also of the bladder. These movements are more easily produced, the more nearly the middle of the lumbar spinal cord is approached. A great many of the neuroses to which women are subject, arise out of, or are in intimate reactive relation with the play of her sexual system, and the key to many of her nervous disorders will be found here. Thus, puerperal insanity is, pathologically speaking, due to the carrying of morbid elements from the uterus into the general system by absorption. Likewise syphilitic insanity in women is due to the syphilitic poison first attacking the mucous membrane and from this point of departure invading the central nervous system. The most subtle instance of nervous syphilis, is that where an ovum is impregnated by a tainted male, the child being born with nervous syphilis.

Finally, we may find some neuroses of women in infancy and childhood, owing to faults of development of the sexual organs and the accidents from injury or disease to which they are liable.

We may find nervous and mental diseases in women at puberty and during the virginal state—some being in consequence of the developmental fault alluded to; others arising from functional difficulties, etc.

We may have nervous and mental diseases in women connected with pregnancy and parturition.

We may have nervous and mental diseases in women consequent on parturition and childbed.

We may have nervous and mental diseases in women connected with, or dependent upon, mechanical or strictly surgical affections of the ovaries, uterus and vagina, original or acquired, including displacements or malformations of the uterus, and diseases of the ovary and broad ligaments.

We may have nervous and mental diseases of women connected with the climacteric, more immediately attending and following the menopause.

We may have nervous and mental diseases in women associated with error of function of the ovaries and uterus, and also associated with lactation.

All of these cases may transmit a neurotic tendency to their children—not a tendency to any one particular disease, but a vulnerability of the nervous system, as a whole; so that under the influence of even a comparatively slight strain, this weakness may manifest itself in one or the other of various ways. It may show itself by mere general nervousness, by chorea, by epilepsy or by some form of insanity, while in some of the more vigorous children, the neurosis may die out and fail to be manifested at all. I have seen many times, in women suffering from nervous disease dependent upon ovarian or uterine troubles, illusions, hallucinations and delusions owing to a functional exaltation of the primary ganglia, which functional exaltation was due to the morbid state of the uterus and ovaries. We may find perverted sensation and perception; perverted emotion and ideation from hysteria to actual insanity; perversions of consciousness; perversion of motility as tremors, twitchings and spasms or even reflex paralysis, and vomiting, nutritive or trophic changes and perverted visceral action of heart, bladder and digestion.

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ART. V.—**Review of Medical History in the Middle Ages—From the Fifth to the Seventeenth Century.** By J. EDGAR CHANCELLOR, M. D., Professor Medical Department University of Florida, ex-President and Honorary Fellow Medical Society of Virginia, etc., Tallahassee, Fla.

Galen's teachings and influence were impotent (after his death), to arrest the disintegrating effect of internal decay; and the contention of sects and the advance of superstition, and belief in the efficacy of amulets and charms became almost universal, and extended through the first fifteen centuries of the Christian Era.

Although with the Latins, Roman medicine declined in Europe in the early centuries after Christ, it was followed and advanced by the Arabian School which flourished from the ninth to the fourteenth century. In the period from the fifth to the tenth centuries in Europe there was almost a blank. Superstition took the place of progress and science. Medicine, as a learning, found its chief home in the monasteries, and, though not advanced, was saved from total oblivion. Many ancient works were in Latin and were preserved.

Arabian Medicine claims a brief notice. The rise of the Mohammedan Empire was not without its influence upon medical history, for after the Mohammedan conquest, learning began to flourish. Schools of medicine connected with hospitals, and schools of pharmacy were established at the seat of *Moslem* power. In the dark ages we find that the literati were the healers, and claimed acquaintance with the Greek physicians. In their history of medicine they gave to Apollo the art of surgery; to Æsculapius the art of curing internal disease; to Asclepiades the clinical observation of maladies and the art of reasoning thereon; to Hippocrates the teaching of diagnosis of disease—after whom Pluto and Aristotle rendered all consistent by the theory of four temperaments, corresponding to the four natural elements. The physicians of this day knew the Ascarus. Their specifics were sulphur and tar. Phlebotomy was also practised.

In A. D. 993, thus early in the Saxon era, the fourth Laterian Council prohibited the regular clergy from doing any operations of surgery involving the shedding of blood, and assigned manual operations to seculars and clerks. The separation from priestly interference led to medicine becoming a science.

About 1131 A. D. medicine was separated from theology. The sixth Laterian Council forbade Monks and Canons the study of civil law and medicine. Henry I. was King. It was about this date that, in France, practitioners were called "Myres."* This continued to the time of Edward III. The students of Hippocrates and Galen, at this time obtained

*Latin, "Miras" (admirable)—extraordinary—Greek, Myron—unguentum ("myropasus"—an anointer.)

the reputation of knowing the laws of nature, and the ability to assist her operations. Hence the new name physician.

Dr. J. M. Toner says: The terms surgeon and physician in ancient times, as at the present, often were applied to one person. In the earliest times of which we have an account, the surgeon was assistant to the physician. It early became separated, as in the oath of Hippocrates it appears. Lithotomy was forbidden to the physicians. The Arabians physicians thought it beneath their dignity to perform surgical operations. The Romans left the practice of surgery to their slaves.

In Egypt, India, China, Japan, among savages and half civilized tribes in different countries, the healing art was associated with the supernatural.

According to Grecian poets, fifty years before the Trojan war (1242 B. C.), Melampus, Chiron, and his disciple Æsculapius, accompanied an expedition as surgeons. In the Trojan war the two sons of Æsculapius—Machaon and Podalirus—took care of the wounded Greeks. Circumcision and venesection were among the earliest surgical operations of which we have any account.

At Damascus, Greek medicine was zealously cultivated with the aid of Jewish and Christian teachers. So at Bagdad. The names of Mensa and Johannitius appear as the translators and commentators of Hippocrates and Galen, A. D., 857-8.

The names of Rhazes, Avicenna and Avenzoar were rendered famous, drawing students from the whole continent to the renowned Spanish schools of Cardova, Seville and Saragopa. From the tenth to the thirteenth century was the brilliant period of *Arabian medicine* in Spain. This period begins with Rhazes 925-26 A. D. He practised medicine with distinction at Bagdad. He followed the teachings of Hippocrates and Galen, and was a voluminous writer. Rhazes is accredited with having first described the small-pox and measles in a proper manner.

Avicenna has always been regarded as the chief representative of *Arabian medicine*. At one time in Europe his works eclipsed those of Hippocrates and Galen. His "Canon or Encyclopædia of Medicine" (his chief work) was a compila-

tion of medical and surgical knowledge, founded upon the works of Aristotle, Hippocrates, Galen and the earlier Arabian writers.

The works of Hippocrates, the commentaries of Galen, and the writings of Avicenna, have exercised a greater influence over the minds of medical men and for a longer time than all other authorities the world has ever produced. Avicenna lived in the darkest and most gloomy period of the intellectual history of man. Like Galen, he was possessed with a high order of intellect, and made the best use of his educational advantages. By the end of his seventeenth year he had compassed the round of the learning of his time. The medical and surgical writings of Avicenna were the most popular from the twelfth to the seventeenth century, overshadowing the names of Rhazes, Hales, Abbas and Avenzoar, of the same epoch. His learning and skill secured for him the title of "Prince of Physicians."

The actual cautery seems to have been with Avicenna, as with all Arabian surgeons, very popular; it was used for many diverse affections. Arteriotomy was practised by him in vertigo and chronic affections of the eyes. Avicenna describes the operation for pterygia of the eyes much after that of modern surgeons; also the operations for cataract, after Paulus and Celsus, couching and extraction. He did not approve of it. The operations for fistula lachrymalis, polypus of the nose, tongue-tie, laryngotomy, and many others, known to the modern surgery, are mentioned.

It is proper to say that many of the Arabian surgeons regarded the operation of lithotomy as disreputable. Avenzoar, as did Hippocrates, condemned it.

In the ninth century we have notice of the Salernitan physician, though the origin of the medical school at Salerno, on the southwest border of Italy, is in doubt. It was noted for the salubrity of its climate and the seat of the Benedictine monastery. Many of the professors were married, and their wives and daughters appear among the list of teachers. *Tortula* was the most noted of the female professors of the eleventh century. Among the professors were some Jews; also some Jewish students.

Twelfth and Thirteenth Centuries. On the introduction of Arabian medicine, the great popularity of Salerno began to decline. The foundation of the University of Naples and the rise of Montpellier contributed to this. If the school of Salerno did not advance the science of medicine, it arrested its decline when all learning was falling into decay. It is thought that patients were received into the hospital and that clinical instruction was given at Salerno; thus may this school be said to form a bridge between *ancient* and *modern* medicine. Many of the clergy, distinguished for their learning and medical acquirements, were found here; also teachers of philosophy and law. Recent researches show *Salerno* to have been a secular school. An edict from Napoleon I. dissolved it in the year 1811.

In the thirteenth century the Arabian version of Greek medicine was supreme in the medical world. Through the rise of universities medical learning became more widely diffused. We find in the school at Montpellier, where a medical faculty existed early in the twelfth century—the first definite advance in modern medicine. The medical school owed its foundation largely to Jewish teachers, who were educated in the Moorish schools of Spain.

The study of medical classics in their original language worked another revolution, and the supremacy of Arabian medicine rapidly declined.

During 1162 A. D., at a council held at Montpellier, a decree was passed forbidding the practice of medicine by the Monks. This was probably the first step in the process of divorcing medicine from the church. It took many years for its consummation. Up to the fourteenth century, nearly all physicians were *ecclesiastics*; from this time medicine was steadily progressive.

It should be noticed that in the libraries both at Salerno and Montpellier half the books were Hebrew; half Arabic. At Salerno there were Arabic translations of the works of Hippocrates, Galen, Celsus, Hebrew copies of treatises on fevers by Rabbi Solomon Ben Isaac, and the pendants of Aaron of Alexandria, who is also credited with first describing the small-pox. Rhazes was known as the eagle-eyed doctor of

his race. Rabbi Moses Ben Maimon was known all over Europe as Maimonides.

The general reader must be impressed in following the early history of ancient medicine, with the thoroughness of the scholars of that day in the sciences and in general learning. It was at Montpellier that the first medical botanic garden in Europe was established. Science was nurtured among the flowers. This garden continued until recent times. In its bed might be found all the herbs of the then pharmacopœia.

The University of Paris procured a decree prohibiting an Israelite from practising medicine in France, in A. D., 1306, when Profonatus, one of the race, was Regent of the Montpellier faculty; not a doctor or professor was spared. *Great cruelty was resorted to, and many died in the streets. Such was the bitter nature of the people against this nationality.

With the establishment of the medical schools of Montpellier, Bologna and Padua, began the decline of Arabic medicine and the revival of Greek literature.

We let fall the curtain that separates the history of ancient medicine from modern or European medicine. It is difficult to fix upon the precise date at which the history of ancient medicine may be said to end, and that of mediæval medicine began; so of modern medicine. "A great author declares that the horologe of time does not put out the passage from one era to another." From a strictly historic standpoint, we may be said not only to have crossed the bridge from ancient to mediæval times, but in our rapid transit we have sailed over the billowy ocean of the middle ages, finding here and there a port of safety for human suffering, with its islands and light-houses of science, to shelter and point out dangerous shoals.

Medical history (says Thatcher) affords abundant evidence of the instability of human systems. Every age has turned with its theories, or visionary hypotheses, changeable as the wind, scarcely surviving their authors, but yielding to others as transient as themselves. And yet, looking back to the beginning of this great science, to its progress and development, we see the hand of Omnipotence guiding, and Infinite Wisdom developing one science after another as the human family is prepared to receive and utilize it.

Clinical Reports.

Hysterical Simulation of Labor and Spontaneous Version in Placenta Prævia. By J. GRAMMER, M. D., Halifax C. H., Va.

Various and curious as are the manifestations which hysteria can exhibit, I think the following case will not prove uninteresting :

Wednesday Morning, Jan. 30th. I was called to see Ailsie Ann E——, a colored widow, 30 or 35 years of age, who was said to be in labor, and in urgent need of assistance. I reached her about 11 A. M. The woman who was attending her as midwife informed me that she had been in labor since Sunday morning, that bearing-down pains had been going on since daybreak, and that the waters had been dribbling away ever since; that she had vomited nearly a pint of blood about breakfast time, and was still occasionally vomiting or spitting it up; that the head of the child had been nearly born, and had suddenly gone back some two hours before, since which time the "pain had gone up in her stomach," and that she had had several terrible chills, which "farly shuck de whole house."

Of course, rupture of the "membrances" was my first thought. But the pulse was good, though a little quick and excited; the skin was natural to the feeling, with a rather free perspiration about the neck and body; the head was a little hot; the hands and feet were warm, and there was no appearance to indicate collapse, though the reputed retreat of the child's head had taken place two hours before. She was having, apparently, strong pains, and she complained of constant as well as periodic "misery" in her stomach, and she besought me all the time "to send the pains down again where they belonged." She was also coughing a good deal, and occasionally she spat some soft mucus—sometimes a little specked with blood.

On digital examination, made in the absence of a pain, I found the vulvar orifice large, swelled and extremely sensitive, a hæmorrhoidal-like tumor, as large as the end of the thumb, protruding from the left labium; the whole vagina was filled with similar tumors of different sizes, though less prominent. One, almost as large as my fist, presented on the anterior wall. The whole vagina had about the same feel, tenderness and enlargement, as if a child had just passed through it. The os uteri was very high up, which was reached with difficulty. The os was lightly closed and hard,

except on one side, where there was one of those puffy, tumor, hard-like swellings. A pain coming on, the *vagina* contracted with considerable force. The tumors swelled, and the large one on the anterior wall almost protruded from the vulva, but there was no change either in the position nor in the condition of the os.

Examination of the abdomen externally revealed nothing unusual; the uterus was firm and distinct in all of its outlines; but during a pain, there was a hard, well-defined lump or knot over the fundus, reminding me very much of the epididymis, or of the supra-renal capsules. She said the pains had gone there, but the "pains" could not be felt during the periods of relaxation, although, she said, the "misery" was there all the time.

After awhile, to increase my perplexity, one of her chills came on, and I may truly say, I never before saw such a shivering fit. It seemed as if she would shake the old bedstead to pieces. Arms, legs and body were jerking with such violence that it seemed as if it could be nothing less than eclampsia; but there was no spasm of the muscles nor clinching of the jaws. This lasted about five minutes and terminated spontaneously.

I was exceedingly perplexed, and I think a greater expert than myself would have felt the same. The vomiting and coughing up of blood, this "appendix" to the fundus, and the pains there, the condition of the *vagina*, as if it had been distended and bruised by the passage of a hard object, the dribbling of the waters, and the persistent assertion of the midwife that she had not only felt but seen the head—everything combined to keep me several hours in anxious watching and waiting.

Two twenty-grain doses of chloral hydrate, with ten grains to each of potassium bromide added, at intervals of half an hour, quieted the symptoms very considerably, but did not relieve the constant pain in the epigastrium. This was the burden of her complaint, and she begged that Dr. J. T. Ballou, who had attended her once or twice before, might be sent for. Of course I assented, but long before he arrived I was sorry that I had allowed them to trouble him. After repeated examinations and close watching, I became more and more convinced that the women (there were several there) had been deceived, and they—patient and all—had unwittingly deceived me.

While I was absent for about an hour she ate some bread, and very soon afterwards threw it up, with a quantity of

blood, she said, and they all agreed that it was so; but on calling for the vessel in which she had vomited, I found not a particle of blood in it. This satisfied me that the story of a pint of blood vomited at breakfast time, as they said, might also be, at least, doubtful. I also found that what the midwife had taken for the child's head was the large tumor on the anterior wall of the vagina, and that this was nothing more nor less than the bladder, which, when tolerably filled, was by some peculiar action of the muscles almost forced out of the vulva. By a steady and gentle pressure upwards and forwards, I evacuated it of a quantity of perfectly limpid and inodorous urine, which might very easily have been mistaken for amniotic fluid. This accounted for the "dribbling away of the waters." I found, too, that the pains were not uterine at all, but were produced by the diaphragmatic, abdominal and pelvic muscles.

After these false pains had been quieted for some time by the chloral, the hæmorrhoid-like tumors in and about the vagina almost entirely disappeared. The effects of the chloral lasted about two hours, and she was getting very restless again, and complained of pain in her stomach. I had prepared another dose of chloral to give her, when another severe shivering fit came on. It was not a chill, for she disclaimed any sensation of cold, and would wonder why she should shake so, not being at all cold. I changed my mind, and determined, as I was pretty sure she was not in labor, to see what effect an oxytocic would have. I accordingly gave her a teaspoonful of tincture of mistletoe (which I usually prefer to ergot). She had scarcely swallowed it when the shivering ceased, and she exclaimed, "Dar! Thank God, it's gone back to my belly again." A violent pain came on, succeeded by others, which continued for about a half hour, when I stopped them with another dose of chloral. During these pains the *supra-fundal* lump *had entirely disappeared*, and she complained no more of the stomach.

These pains had every external appearance of true bearing-down pains—the woman holding her breath, bracing her feet and knees, and grasping at every one who approached her.

The instantaneous action of the mistletoe was about the most curious I have ever known of all the strange phenomena of hysteria. It could not have acted by absorption, nor could the woman's own spontaneity or imagination have had anything to do with it, for I did not tell her what it was nor why I gave it. Could it have been a hysterical intuition, or

the medicine generally supposed to act only on the uterine fibres, so impressing the sympathetic system as to produce an immediate change in a set of feigned symptoms, engaging it in carrying on the deception by another set of symptoms proper to itself? Did the sympathetic symptoms recognize instantly the specific action that the mistletoe was to have, and hence produce the appearance of bearing-down pains in the womb?

The last dose of chloral quieted her completely, and in an hour or so Dr. Ballow arrived. He informed me that he had had an almost exactly similar experience with her once or twice before; and also that she was the same woman whom he and I, with four more of our medical brethren, had visited about fifteen years ago with the expectation of removing a large ovarian tumor, which she had led two attending physicians to believe had been growing in her for at least eighteen months. On that occasion, on examination, some were satisfied that she was pregnant. Our consultation terminated in the administration of half a grain of morphia sulphate, and our diagnosis was confirmed the next day by the tidings that she had been safely delivered of a boy.

With this additional light as to her idiosyncrasy, we left her, with a vial of tincture of valerianate of ammonia and a few doses of morphia sulphate.

I called by to see her again *February* 20th, and found her in bed, though apparently doing very well. She informed me that she had not been in labor any more, but had been vomiting blood every day almost, and discharging some also from the vagina. I found nothing about her to indicate much loss of blood, and the os was as high and as close as ever; and when I told her she would perhaps have to wait a month longer, she asserted very triumphantly that she always did go twelve months with child anyway. She had had thirteen living children, and I recognized in this statement the almost monomaniacal desire of hysterical women to deceive, to astound, or to alarm.

March 19th. I saw her again. The child had been born dead, *March* 13th, after a long labor; foot presentation. She told me that she had lost blood every day, and the day before and day of her labor, she had bled very profusely, but that the hæmorrhage stopped when the labor fairly commenced, and she had none afterwards. I could not learn from her, nor from either of the two women who were with her, the exact time when the placenta was discharged. The

women confirmed her account of the hæmorrhage and the foot presentation, and added that the labor was prolonged by the shoulder and arm "getting hung."

I have no doubt but that this was a case of placenta prævia, and that Nature resorted to the same plan that we have with difficulty learned, and made a spontaneous podolic version. Whether the version was being accomplished during the pranks that she was playing during my first visit or not I cannot undertake to judge.

Drainage Tube in Empyema, Pyonephrosis, Abscess of the Liver and in Abdominal Surgery By BEN. HARRISON, M. D.,
St. Lukes Home for the Sick, Richmond, Va.

*CASE I.—*Empyema*.—(Service of Dr. Hunter McGuire.) T. C., white, æt. thirty years, received three knife-wounds in a street-fight. The first was in the back, about two inches from the spine, just under the last rib. It passed downwards and inwards, and was thought to have penetrated the peritoneal cavity. Another wound was received just above, a little behind, and about an inch to the inside of the acromion end of the clavicle. This passed downwards, inwards and forwards and under the sterno-cleido-mastoid muscle towards the trachea. The third, and most serious wound of the three, began about an inch behind the clavicle, opposite the junction of the inner and middle third. This wound passed downwards and outwards into the apex of the left lung. Hæmorrhage at the time was quite profuse; blood and air escaped freely. The shock was great and prolonged; reaction set in so slowly that there was danger of death from syncope. In overcoming this intense shock, the beneficial effect of quinine, hypodermically administered, was especially noticeable. In a few days, the increased difficulty in breathing, the constant sense of oppression, dullness and flatness on percussion, getting correspondingly higher and higher as the fluid rose in the pleural cavity—all showed that pleuritic effusion was taking place. The respiratory area on the affected side became very small, and was hourly becoming more limited. Aspiration was resorted to, and several pints of bloody serum removed. The respiration and the heart's action immediately became more regular, slower and less labored. The serum showed no evidence of septic change, but had floating in it shreds of coagulated lymph. This operative interference gave relief for several days; but, at the

end of that time, reaccumulation, with all of the attending symptoms of compressed lung and displaced heart, had reappeared, and aspiration, followed by temporary relief, was again resorted to. The fluid at this time showed unmistakably that there was septic degeneration. The period of relief after this tapping was of short duration, and now slight evidences of systemic septic infection began to show themselves, calling for free drainage.

Accordingly, an incision was made between the sixth and seventh ribs, and several inches of perforated drainage tube was introduced. This was followed by the escape of a pint or more of very offensive sero-purulent fluid. The cavity of the pleura was then thoroughly syringed out. This treatment was followed by a decided lessening of the febrile symptoms. Every day the cavity was washed out with warm water, medicated with iodine, carbolic acid, or chloral, and twice a day the patient was made to empty the accumulated pus by coughing and turning on the injured side. Air rushed in and out of the pleural cavity through the tube and, at times, around it. This, contrary to the usual experience, gave rise to no trouble, and, as far as we could tell, no increased septic change resulted. The pressure of the air within the chest seemed to resist the outside atmospheric pressure and to prevent any great collapse of the chest wall; certainly there was much less sinking in than the teaching of most writers would lead us to expect.

In twenty days the wounds had healed, and the discharge through the tube did not amount to more than half an ounce in twenty-four hours. About this time, from imprudent eating or some other cause, the patient had an attack of acute dysentery, which lasted for ten days, and at times seriously threatened his life.

After the acute stage was over, we were much surprised one morning when the patient passed, *per rectum*, several ounces of pure creamy-looking pus. It came unmixed with other intestinal excretions, and had in it no blood or mucus, and looked as if it had just been discharged from an abscess. Even during the continuance of the acute dysentery, there was but little abdominal tenderness or distension, and the daily use of the thermometer showed but little febrile disturbance. Nothing had occurred to give rise to the suspicion that there was suppuration going on in the pelvic or abdominal cavity. The purulent discharge was too much, and not of the character usually found in suppuration of the mucous membrane of the bowels; besides it was entirely

absent in many of the operations, which were now well formed, not too frequent, and painless. In the twenty-four hours, the patient would have one or two natural movements from the bowels entirely free from any trace of pus. Then a desire to go to stool would result in the discharge of a few ounces of pure pus. Sometimes the discharge of pus would be followed by some faecal matter, but never, in a single instance, was there pus and faecal matter mixed, as we have it in dysentery.

The only explanation of this discharge was that an abscess resulted from the wound in the back and peritoneal cavity. This abscess in all probability formed soon after the injury, and the symptoms of its formation were over-shadowed and masked while the acute suppurative pleuritis was going on. During the attack of acute dysentery, when life was really in great danger, if death had occurred it would have brought about a difficult medico-legal question to solve. The wounds were then all closed; there was but little discharge through the tube, and convalescence was so far advanced that recovery was almost assured. If the patient had died at this time it would have been a strong defence to have claimed that death resulted from the dysentery, and not from the wounds. All discharge from the bowels finally disappeared, and that through the tube became only a few drops of serum. The tube was taken out and the wound allowed to close. The patient is at this time enjoying good health, and there is a return of some vesicular murmur.

The treatment of this case tends to show that it is not always necessary to resect a portion of a rib, that one opening and a flexible rubber drainage tube is sufficient to secure perfect drainage, and a means of washing out the pleural cavity, that aspiration alone does not meet the indications; that the introduction of air does no harm, and that antiseptic surgery in such cases may be narrowed down to free drainage and antiseptic washes.

CASE II.—*Pyonephrosis*.—(Service of Dr. McGuire.) This case occurred in a young man whose family record showed a marked hereditary tendency to nephritic disease. His father was at the time insane from Bright's disease; his mother was an imbecile from the same cause, while the patient himself and a brother had been cut for stone by Dr. McGuire.

The symptoms of pyonephrosis came on suddenly, were well marked, and from the first were attended with great

constitutional disturbance, such as chills, high fever, sweats, loss of appetite, insomnia, etc. The local symptoms were also very plain. The urine at first was loaded with pus, but later on all traces of it disappeared. This was supposed to be due to a complete disorganization of the kidney structure or to an obliteration of the ureter on the affected side. Pain and swelling in the left lumbar region soon showed where the abscess would point.

The following notes written by the patient are descriptive of his suffering: "I retired on Tuesday night, feeling perfectly well, but was awakened about twelve o'clock with a severe chill, which was followed by a high fever. The next day I felt badly, but had no pain, and went to work. In two or three days, however, I began to feel a pain in my left side, below the ribs, and I suffered very much from a general sick feeling. The pain in my side continued to increase and the sick feeling to get worse. My whole side now pained me from my shoulder down, particularly when I took a long breath. It felt as if it was full of wind. The pain seemed to draw my body to one side, and to be more severe in one spot—the same spot that was afterwards cut. After the abscess was opened I did not feel any pain, or feel bad in any way. My appetite came back to me, and I began to gain strength."

On making a lumbar section, a quart or more of very offensive purulent matter was evacuated. It had no urinary odor, was thick, and seemed to be unmixed or changed in any way by the kidney products. By exploring with the finger through the incision, the kidney structure seemed to be entirely disintegrated, and only what appeared to be the distended capsule remained. A drainage tube was introduced; the cavity of the abscess flushed out, and, as mentioned by the patient, he began to improve at once. The cavity was syringed out daily, the wound kept open with the drainage tube for months, and the patient finally made a good recovery.

CASE III.—*Abscess of the Liver*.—(Service of Dr. Hugh M. Taylor.) Thos. H., æt. about forty, of good family, was, when first seen, supposed to be suffering with a mild attack of continued fever. For several days he had had slight febrile disturbances, such as headache, backache, tired feeling, loss of appetite, sleepless nights, etc. His tongue presented very much the appearance of that found in cases of continued fever. His bowels were constipated, and the kidneys were torpid. Under the influence of quinine, sulphuric acid

and mercurial purgatives, in a few days a decided febrile remission was brought about, and the patient felt so much better that upon his own responsibility he got up and went out. In a few days a marked exacerbation of the former symptoms resulted, accompanied, however, with a slight pain in the right hypochondriac region and down to the corresponding thigh and groin. The greatest amount of pain was experienced in the back of the thigh over the sciatic nerve. As there was but little constitutional disturbance, little emaciation, no very marked anaemia and a noticeable absence of physiological signs indicating suppurative action, palliative remedies were resorted to for a few days longer. At the end of that time, however, a slight swelling made its appearance over the seat of pain in the right hypochondriac region. In twenty-four hours there was dullness and appreciable enlargement extending from the eighth to the last rib and from the spine to the angles of the ribs. There was decided pitting on pressure and some bulging of the intercostal spaces. Operative interference seemed called for, and an hour the next morning was designated.

When visited the next day, all obscurity was removed. The patient had coughed up during the night a teacupful or more of pure pus. As this discharge had had but little if any effect upon the swelling in the hypochondriac region, an incision was made in the most dependent part, at which fluctuation could be detected and several inches of drainage tube introduced. A pint or more of inodorous and not unhealthy looking pus was evacuated. The force with which the pus spurted out and the undiminished swelling showed that the opening through the lungs had gone only a little ways towards emptying the abscess.

This would indicate that such an opening is not always sufficient to drain an abscess of large size; nor is this to be wondered at when we remember that the pus has to be forced "up hill" by the action of the abdominal muscles, diaphragm and lungs. And yet statistics show that by far the largest number of cases that recover are those in which the abscess bursts into a bronchial tube. Of 300 cases compiled by Waring, twenty-five recovered; of these ten opened through the lungs. After the drainage tube was introduced the cavity of the abscess was syringed out with carbolyzed warm water.

During the following twenty-four hours, a quart or more

of fluid drained through the tube; the free drainage was attended with a marked remission of febrile disturbance, and the diversion of the fluid from its route through the lungs to that through the tube resulted in a speedy amelioration of the chest symptoms. His cough became so slight as to give him but little annoyance, and was attended with a gradual but finally an entire cessation of purulent expectoration. The good resulting from this dependent drainage was very marked. Within a week there was no purulent discharge through the lungs—only an occasional discharge of mucus. The drainage tube was kept in for several weeks, and every day the cavity of the abscess was thoroughly syringed out, and every few days the tube was shortened. The discharge lessened gradually; the patient gained strength rapidly, and in two weeks was out on the street.

CASES IV AND V.—*Ovariectomy*.—(Service of Dr. McGuire.) These cases, in which the drainage tube played an important part in conducting the patients to a safe issue, presented no special points of interest until the condition calling for free drainage arose. The operations were easily performed, and were marked by no special complications. The adhesions were not numerous; hæmorrhage was not troublesome. The pedicles were satisfactorily treated by the intra-peritoneal method; reaction in due time set in, and at no time during the first ten days was there excessive febrile exaltation. During all of this time nothing occurred which could awaken anxiety. Convalescence was thought to have set in, the crisis to have been passed, and there was every indication of a speedy recovery.

At the end of ten days, or the beginning of two weeks, the favorable aspect in both cases underwent a rapid and marked change. For several days the countenance and thermometer afforded a decisive indication that something wrong was going on. In place of a countenance which had been placid, painless and expressive of great thankfulness and hope, there resulted the anxious, care-worn expression of suffering. Accompanying the high temperature there was marked waste, quick pulse, chilly sensations, sweats, loss of desire for nourishment, vomiting, restlessness, distended belly and pain located especially in some one spot, indicative of a focus of inflammatory action.

An examination, *per vaginam*, revealed a fullness in Douglas' cul-de-sac. An opening was made into it, and a quart or more in each case of purulent fluid was evacuated. The opening into the cul-de-sac was made without causing

the patient much pain. A long curved bistoury, the cutting edge of which was wrapped with strips of linen to within half an inch of its point, was carried boldly into the most prominent part of the bulging, and an opening was made large enough to admit a large rubber drainage tube. In introducing the knife into the vagina its point was guided and guarded by the index finger of the left hand. As soon as the opening was made, the discharge poured out of the vagina. It looked like a mixture of blood, lymph and pus, and was formed probably from broken-down blood-clots and coagulated lymph, some of which had degenerated into pus.

It is an unanswerable question how long this degeneration was going on, but the symptoms of such a change existed for a very short time. A drainage tube was introduced and the cavity thoroughly washed out with warm carbolized water until the water came back clear. For weeks the tube was kept in position, and every day the syringing process carefully carried out. This treatment was followed by a rapid cessation of all dangerous symptoms. The discharge gradually decreased, and in several weeks it had diminished to a few drops of serum. The tubes were then taken out, and in time the patients were discharged well. Both are now enjoying good health.

The ends of the tubes outside of the vagina were placed in a dish, into which the fluid drained continuously. No special precautions were taken to prevent the entrance of air, and no symptoms of increased septic changes resulted.

It has been claimed that the drainage tube opens the doors to the invading army of bacteria. It is just as true that it affords them a ready means of egress, and it certainly opens a tunnel through which they can be attacked and dislodged from their otherwise secure position within the peritoneal cavity. If present in these cases, they were certainly very effectually routed.

The *Medical Press and Circular* relates the story of a fashionable mother who, objecting to the scurfiness of the heads of her children who were recovering from scarlet fever, took them to a prominent hair dresser and had the scurf thoroughly removed by the machine-brush—a sample of cussedness, or cussed ignorance. Either a policeman or a school teacher is needed for this woman and all her kind.

*Correspondence.**Cocaine.*

UNIVERSITY OF CITY NEW YORK, NOV. 10TH, 1884.

Editors Virginia Medical Monthly:

The new anæsthetic, "hydrochlorate of cocaine," which has only been introduced into this country some four or five weeks, and which has given such entirely satisfactory results, *so far*, is creating such excitement among the profession generally, that I give you the report of three cases occurring in the practice of Professor Wm. M. Polk, which I had the pleasure of witnessing.

The first case was that of a hysterical, nervous woman, with lacerated cervix uteri. Trachelorrhaphy was performed with entire absence of pain after first painting the whole cervix and adjacent parts with a four per cent. solution of the hydrochlorate of cocaine. The woman declared she was absolutely free from pain.

The second case was even more remarkable. It was that of a gentleman in Brooklyn, seventy years of age, who had been a great sufferer for many months with a cystic degeneration of the liver, which had so prostrated him that anæsthesia by inhalation was out of the question. Here Dr. Polk performed abdominal section, cutting through the abdominal parietes and peritoneum to the cyst, which discharged five quarts of pus, putting in a drainage tube of glass. He then stitched the peritoneum to the abdominal walls, and all without a particle of pain or inconvenience to the patient. The anæsthesia was produced simply by painting the parts as he proceeded with a four per cent. solution of the hydrochlorate of cocaine, and waiting each time for a few minutes to allow the solution to dry.

The third was a case at Bellevue Hospital operated on for cystocle, when the remedy was used with much satisfaction.

These cases, in connection with the many others reported, would tend to show this to be a most useful *local* anæsthetic, though we must not forget the remedy is only in its infancy.

The cost of the medicine in this city is about (\$6,000) six thousand dollars per pound.

L. ASHTON, M. D.

Proceedings of Societies.

Virginia State Board of Medical Examiners.

Pursuant to the call of the Governor of Virginia, the State Board of Medical Examiners met in the hall of the Academy of Medicine, in Richmond, Va., November 15th, at 10 o'clock A. M.

There were eighteen members present, namely: Drs. F. D. Cunningham, of Richmond, and W. C. Dabney, of Charlottesville, from the State-at-large. Drs. W. W. Douglas, of the First Congressional District; Jesse Peek and Thos. Ward, of the Second District; C. R. Cullen, of the Third District; W. J. Harris and Hugh Stockdell, of the Fourth District; R. W. Martin and W. L. Robinson, of the Fifth District; H. Grey Latham, of the Sixth District; H. T. Nelson, of the Seventh District; Bedford Brown, Alex. Harris and C. C. Conway, of the Eighth District; R. J. Preston and R. D. Hufford, of the Ninth District; and G. D. Merriwether, of the Tenth District.

Dr. Bedford Brown, of Alexandria, was, on motion, made temporary chairman, and the election of permanent officers was then held.

Dr. W. C. Dabney, of Charlottesville, was elected President; Dr. F. D. Cunningham, of Richmond, vice President; and Dr. H. T. Nelson, of Charlottesville, Secretary and Treasurer.

On motion of Dr. W. L. Robinson, of Danville, a committee of five, to which the President and vice-President were subsequently added, was appointed to prepare some plan of examinations to be submitted to the Board for their consideration.

The following committee was appointed:—Drs. W. L. Robinson, of Danville, W. W. Douglas, of Richmond Co., H. G. Latham, of Lynchburg, Alex. Harris, of Culpeper Co., R. J. Preston, of Abingdon, W. C. Dabney, of Charlottesville, and F. D. Cunningham, of Richmond.

Drs. W. L. Robinson and Hugh Stockdell were appointed a committee to notify the Governor that the Board had met, pursuant to his call, and had organized.

A recess was then taken for two hours so as to allow the committee time to consider some plan of examinations, etc.

When the Board re-assembled the committee proposed the following plan:

1st. That two meetings of the Board be held each year—one in April, the other in December. The first meeting is to be held in April that any graduates who desire to do so may come before the Board for examination immediately after leaving college. This meeting may be held at any part of the State which may be thought best by the Board. The second meeting in December is to be held in Richmond, and is for the purpose of bringing before the Legislature, when in session, such measures connected with the law regulating the practice of medicine as may be found necessary. Of course applicants may be examined at this meeting also.

2d. That any person desiring to appear before the Examining Board should be furnished with a blank form of application by the Secretary and Treasurer, on which he should state his age, the length of time spent in medical study, his previous educational advantages, when and where he graduated, etc., etc. This blank application, when filled out and returned to the Secretary, with the fee of \$5 prescribed by law, entitles the applicant to a permit (which is to be presented him by the Secretary) to go before the Board in session, or any three members thereof whom he may select.

3d. That a blank form for questions should be adopted providing for six questions on chemistry, eight on anatomy, eight on physiology, four on hygiene, fifteen on materia medica and therapeutics, six on obstetrics, twenty on practice, and twenty on surgery.

Each examiner (when the applicant is not examined before the Board in session), is to ask a question for each number under each branch or sub-division, and the question is to be written opposite the number. The blank thus filled out and signed by both examiner and applicant, is to be sent to the President of the Board along with the written answers of the applicant, and are to be read out before the whole Board at their next meeting. The applicant is required to answer correctly three-fourths of the questions on each subject satisfactorily.

These plans were unanimously adopted by the Board; and after a committee had been appointed by the Board, on motion of Dr. Robinson, consisting of the President, vice-President and Secretary, to adopt suitable by-laws, the Board adjourned to meet in Richmond some time in April, 1885, at the call of the President.

Book Notices, &c.

Legal Medicine. By CHARLES MEYMOTT TIDY, M. B., F. C. S., Professor of Chemistry and Forensic Medicine at the London Hospital; Master of Surgery, etc., etc. Vol. III. 8mo. Pp. XXI.—321. New York: Wm. Wood & Co. 1884. (For sale by West, Johnston & Co., Richmond, Va.)

At last we have the third volume of Tidy—published as the January number of “Wood’s Library of Standard Medical Authors”—and although we might have preferred securing it last year with the first two volumes, we welcome it with pleasure now. Not since the first edition of “Taylor’s Medical Jurisprudence” made its appearance has any such valuable work on legal medicine been presented to the profession, and with that book it stands at the head of such publications. The present volume is written from notes prepared for the author’s lectures on the subjects delivered at the London Hospital in 1882, and is consequently brought up to a very recent date. It deals in the earlier part with medico-legal aspects of sexual relationships, and in the latter part with the various forms of death by asphyxia. One of the things attaching particular value to this book is the fact that the author has never taken printed authorities as standards in preparing the work in question, but has, in every case possible, examined the original memoirs, studying the facts upon which each opinion was based. It is not difficult to see, by even a casual examination of the book, what extreme care has been taken to free the mind of the author from bias, as it is evident in more than one or two places that he has renounced his original opinion held upon certain subjects for others more in accordance with later developed facts. It is such things as these which make a reviewer praise a book. A man who is always ready to accept a fact, even if it militates strongly against an idea he has before held, can hardly help but become a safe authority, even if one can plainly see his minor slips.

To most medical men the subject of legal medicine presents an interesting, and we were about to say a romantic side. Outside of the common frailties of human kind, with so many of which we are brought almost every day in contact, there are cases which seem beyond all possible parallel—such as the now historical case of Dr. James Barry, of England, the female who for so many years thoroughly be-

fooled every person with whom she was brought into association—making every one think her a man; and yet, did the outer world but know it, instances as strange and peculiar occur infrequently, and are confided to the secrecy of the medical attendant without fear of further communication. Of course every case of any medico-legal importance which has been presented before a court is fully referred to in Professor Tidy's work, if needed to illustrate a point, but how we wish that cases out of the common way occasionally appearing in private practice could be placed on record. They would in so many instances settle a disputed point which was without legal precedent.

The author's easy manner of expression enhances the value of this work, because it impresses the reader with that feeling of a thorough examination of the subject which is only developed after a lifetime study. Although we do not know of an instance in this volume where an error has been committed—and we have compared certain portions with Wharton and Stillé, and with Taylor—it is perhaps too much to say that no mistake can possibly be found; but we will venture the assertion that for a work of the kind it is as nearly absolutely correct in its teaching and medico-legal matters as a book can well be, and it may be fully relied upon by the physician who may desire to post himself on a certain subject before standing an "expert" examination in the witness-box. Every doctor whom the course of events may chance to call upon for a decision or statement of belief in reference to legal medicine should have these three volumes of Tidy where they can be referred to for the purpose of refreshing his mind as to precedents, etc. C.

Physician's Visiting-List (Lindsay & Blakiston's) for 1885.
Philadelphia: P. Blakiston, Son & Co. (From Publishers.)

This popular physician's visiting record is presented for next year—the thirty-fourth year of its publication—and we welcome its appearance with as much pleasure this time as usual. The issue for the coming twelve months is fully on an equality with those of past years, and one thing we would call attention to is its size. Nearly all the regular "visiting lists" are too large for comfortable use in the breast pocket, and one of the great merits of Lindsay & Blakiston's is, that it is of a small and convenient size, and this without leaving out any printed matter which most practitioners think important to be found in books of the kind. The contents of the

book will give the reader who has not yet decided upon which "list" to purchase, a good idea, although not a full one, of its value—as follows: First, after the regular almanac for 1885 and a portion of 1886, is a Table of Signs for private use in the list, next Marshall Hall's method of restoring persons apparently asphyxiated, either by drowning or by other methods of suffocation, then a concisely full description of Poisons and their Antidotes. The Metric System in comparison with that of accustomed use is carefully explained, and an excellent Posological Table comes next, which seems to be as correct as such tables usually are. The table for the calculation for the period of gestation is as good as usually printed. The list of the Newer Remedies is excellent, and is all that is to be desired. Sylvester's method of treating asphyxia is given in full, and the printed matter closes with a diagram of the chest. Of the only two "visiting lists" which we can fairly recommend, this is one.

C.

Health Hints for Travellers. By JOHN C. SUNDBERG, M. D.
Philadelphia: D. G. Brinton. 1884. 12mo. Pp. 61. (From Publishers.)

This small volume, the author says, is based upon the fact that in his many travels he has seen the need of some such work that travellers might not only read with interest but with profit, and it is fair to presume that he feels as if he has succeeded. The general rule may be laid down that "health books" for non-professional are spiced with quackery to a greater or less degree; but whatever faults or imperfections may be found in this work, there is no doubt but that it is clear from that charge. One of the adverse criticisms we have to make upon the book is, that there is too much of the personality of the author obtruded. What do the readers of the manual care if the writer did spend nineteen Winters in Norway, and never suffer much from cold. He specially recommends that a person should never attempt to dry wet feet at a fire, but to remove shoes and stockings and rub the skin dry—a custom rather "more honored in the breach than in the observance." We have never heard of a case of serious illness due to the fire-drying of wet feet. Although the other methods may be the safer, we fancy that travellers will scarcely adopt it in a body. In his chapter on that pest of travellers—mosquitoes—he gravely recommends full and thorough greasing of the body with olive oil; and really offers the advice to rub the head well with kerosene oil to

keep off lice. His recommendation of Persian insect powder to prevent the biting of mosquitoes, midges, black flies, etc., is fairly good, but every one who has tried it knows how evanescent its effects are, and we can give him a point—obtained through the experience of several years camping in the Adirondack and Catskill mountains and lakes—in reference to *Ol. Hedeom*, the common American oil of penny-royal. This if thoroughly rubbed in the skin will almost invariably prevent the biting of these winged insects. We must certainly take the opposite side when we see him recommending the traveller to inhale the vapor given off by a few drops of chloroform placed on a handkerchief, for the relief of headache, etc. Let the medical mind contemplate the unrestricted use of a “few drops of chloroform” by an ordinary educated person. We fear “sudden deaths from unexplained causes” would be alarmingly frequent in coroner’s reports.

In some portions of the book there is much to praise—among other things his earnest desire to see the stockings of the female supported from a waistbelt. In common with all medical men we have seen so much injury from the use of tight garters that we feel that every voice publicly raised against this evil should have every encouragement. It would take but one careful revision of this book to make it really valuable. C.

Students’ Manual of Diseases of the Nose and Throat. By J. M. W. KITCHEN, M. D., Assistant Surgeon to the Metropolitan Throat Hospital, New York City, etc. New York and London. G. P. Putnam’s Sons. 1883. 16mo. Cloth. Price, \$1. Pp. 127. (For sale by West, Johnston & Co., Richmond, Va.)

This is precisely what it represents itself to be—a student’s manual. It is really remarkable how “students aids” have multiplied during the past fifteen years. When we enjoyed our student life, almost the only concise work really fitted for “cramming” or “examination reading” was “Neill and Smith’s Compend,” which often served ourselves and fellows when in a tight place. This book, as far as the subject-matter goes, is far superior to anything contained in that antiquated volume, and if it only covered more ground it would be extremely valuable to the student. As it is, we have never seen a work on this special study which deserved the unqualified praise of the critic. The volume is well filled with illustrations, which seem thoroughly illustrative of the text, and the latter are well adapted to the use of those paying

special attention to the nose and pharynx. The writer says in his preface that the work has been written "with the primary intention of confirming and condensing his own knowledge of Throat Diseases"; and although the announcement may not be that of a retiring and modest nature, he has certainly prepared a work that for special reference by the practitioner and third year study by the under-graduate, is really worth not only purchase, but a place where it may be found for frequent reference. Those affections of the nasal and throat passages which are comparatively rare are not noticed at the length which the more frequently met with diseases are; and the result is that an excellent manual is presented. For the description and treatment of the latter we can safely commend the work. It is worth buying. C.

Auscultation, Percussion and Urinalysis. Edited by C. HENRI LEONARD, A. M., M. D., Professor of the Medical and Surgical Diseases of Women, and Clinical Gynecology, Michigan College of Medicine, Detroit. Fully Illustrated. Cloth. 16mo. Pp. 166. Price (post-paid), \$1. Detroit, Mich. The Illustrated Medical Journal Co. 1884. (From Publishers.)

This little volume, although in the main, unpretending, is really worth purchasing by the student. It is simply a work on physiological diagnosis where the main points of that subject are briefly and plainly stated. No attempt at originality is observed beyond the peculiar arrangement of the matter, except that notes and explanations have been supplied by the editor for the purpose of making the text more clear. The chapter on urinary analysis is written by Dr. Wm. H. Rouse, of Detroit, and is very complete, offering to the student a condensed statement of the methods of examination, etc., required in all cases of urinary disease likely to be met with in general practice. This portion of the book we think is the most valuable. The practitioner can so readily refer to the information he requires in a special instance and, using that as a basis, inform himself thoroughly on the subject by reading up in some volume that treats of it at length. The book is not only of value to the student of medicine but also to the practising physician. It is one of those little works which may be called "handy." The information given is based upon that found in the best treatises on general physical diagnosis, and the illustrations, taken in the main from standard works, fully elucidate the text where needed, adding considerably to the value of the book. The sale of the work promises to be as great as that of the "Vest-Pocket Anatomist" of the same author, to which it is a companion volume. C.

Visions of Fancy. A Poetical Work. By N. M. BASKETT, M. D.
Moberly, Mo. 12mo. Pp. 109. St. Louis. Commercial Printing Co. 1884.
(From Publishers)

A neatly bound volume of poems, which although written by a medical man, contains but one or two referring to professional subjects. Of course it is not fair to make a comparison between the work of a busy doctor and that of one who spends his time in the study of poetical effects, and this little book should not be judged by too high a standard. Still there are one or two poems in this collection which are well worth reading, and we should say that the gem of the work was the one entitled "The Husband to his Dead Wife." It is possible that the author does not rate it as highly as some of the more pretentious pieces, but to our mind its simplicity and rythm make it decidedly the best of the forty-odd in the book. While we have an idea that it is well for every professional man to have some light pleasant work, entirely distinct from his practice, to use as a means of recreation, we feel that it will not be safe for many to attempt to soar too highly into the realms of poetic fancy. Some of our own terrible work in rythm prevents us from recommending this mode of expression of a desire for something different from our daily task. We must, however, say that the volume referred to compares favorably in the main with most amateur work of the kind. C.

PAMPHLETS, REPRINTS, ETC., RECEIVED, for which we have no room for further notice; but most of which can be obtained by enclosing a letter stamp for each pamphlet to the respective authors named.

The Surgery of the Pericardium. By JOHN B. ROBERTS, M. D., Lecturer on Anatomy and Operative Surgery in the Philadelphia School of Anatomy. [In this the author takes the bold ground that the contents of an abnormally filled pericardial sac may be evacuated without serious danger to the patient, and shows that his views are correct.] (Reprint from the *Annals of Anatomy and Surgery*, 1881.) Pp. 6.

Optic Neuritis. By A. FRIEDENWALD, M. D., Professor of Diseases of the Eye and Ear, College of Physicians and Surgeons, Baltimore, Md. [A good essay upon the subject read before the Baltimore Medical Association.] (Reprint from the *Maryland Medical Journal*, August 1 and 8, 1881.) Pp. 10.

On the Nomenclature and Classification of Diseases of the Skin. By L. DUNCAN BULKLEY, M. D., Attending Physician for

Skin and Venereal Diseases at the New York Hospital, Out-Patient Department, etc. [Like everything this distinguished dermatologist writes, pertinent and valuable.] (Reprint from the *Archives of Dermatology*, Vo. VII, No. 4, October, 1881.) Pp. 17.

Hydriodic Acid; Its Chemical Character, etc. [A pamphlet containing the experiences of certain practitioners upon the employment of a proprietary preparation of iodine for internal use.] (R. W. Gardner, New York.) Pp. 16.

The Malignity of Syphilis, with an Analysis of 450 Cases of the Disease. By L. DUNCAN BULKLEY, M. D., Dermatologist to the Hospital for the Ruptured and Crippled, New York City, etc. [An excellent set of tables, based upon the large experience of the author, with conclusions drawn from the same.] (Reprint from the *Transactions of the Medical Society of the State of New York*, 1882.) Pp. 27.

Milk: Its Adulterations, Analysis, etc. By JOHN MORRIS, M. D., Baltimore, Md. [An article upon the subject which deserves to be read by every scientific man.] (Reprint from the *Maryland Medical Journal*, June 15, 1882.)

A Study of Rupture of the Bladder. By ALEX. W. STEIN, M. D., Surgeon to Charity Hospital, New York, etc. [In this the writer not only presents the experience derived from the study of several cases, but shows some experiments made by himself in the closing of the vesical wound. A paper deserving a thorough circulation.] (Reprint from the *Annals of Anatomy and Surgery*, July and August, 1882.) Pp. 42.

Ten Years' Experience in the Treatment of Stricture of the Urethra by Electrolysis. By ROBERT NEWMAN, M. D., Surgeon Northwestern Dispensary, etc. [This little manual shows the method of the author in treating this unpleasant affection, and is a complete answer to those surgeons who have derided this method of operating. For ourselves we must say that our slight experience in this direction amply bears out all the favorable statements claimed for it by Dr. Newman. He has been a pioneer in this mode of treatment, and deserves the greatest credit for his efforts to present it to the profession generally.] (Reprint from the *Medical Record*, August 12th and 19th, 1882.) pp. 44.

Congenital Paralysis of the Sixth and Seventh Pairs of Cranial Nerves in an Adult. Cataract Extraction with Iridectomy in an Infant. By JULIAN J. CHISOLM, M. D., Baltimore, Md. [The first case is in most respects remarkable. The second case

is reported as being the youngest patient ever operated upon for that affection—operation successful.] (Reprint from the *Archives of Ophthalmology*, September, 1882.) Pp. 10.

Elastic Tension and Articular Motion in Pott's Disease. By M. JOSIAH ROBERTS, M. D., Instructor in Orthopædic Surgery and Mechanical Therapeutics in the New York Post-Graduate Medical School, etc. [This essay, read by invitation before the Tompkins County Medical Society, at Ithaca, N. Y., in September, 1882, is an excellent presentation of the advanced treatment of this disease.] (Reprint from the *Medical News*, October 14, 1882.) Pp. 12.

Otitis Media Purulenta. By DUDLEY S. REYNOLDS, M. D., Professor of General Pathology and Diseases of the Eye and Ear in the Hospital College of Medicine, Louisville, Ky. [An excellent little treatise upon the subject, showing the extreme value of Listerine in certain cases of this trouble] (Reprint from the *Medical and Surgical Reporter*, October 21, 1882.) Pp. 8.

Annual Address Delivered Before the American Academy of Medicine at Philadelphia, October 26th, 1882. By TRAILL GREEN, A. M., M. D., President of the Academy. [The address contains a brief history of the origin and progress of the Academy of Medicine.] Pp. 16.

Alcoholic Anæsthesia. By LEWIS D. MASON, M. D., Consulting Physician to the Inebriate's Home, Fort Hamilton, L. I. [A short and not especially valuable study of this form of anæsthesia.] (Reprint from the *Journal of Inebriety*, October, 1882.) Pp. 8.

Tubercular Tumors of the Windpipe—Tuberculosis of the Laryngeal Muscles. A Contribution to the Pathological Histology of Laryngo-Tracheal Phthisis. By JOHN N. MACKENZIE, M. D. [Like everything else Dr. Mackenzie offers to the public, a careful study of much importance.] (Reprint from the *Archives of Medicine*, October, 1882.) Pp. 8.

Three Cases of Stricture of the Urethra Cured by Electrolysis. By JOHN BUTLER, M. D., New York City. [In this the writer gives the history of cases of stricture for which all means were tried to produce a cure—everything failing, until electrolysis was employed. A valuable addition to Dr. Newman's experience.] (Reprint from the *New York Medical Times*, November, 1882.) Pp. 4.

Chapters from Report of Yellow Fever Commission of 1878. By S. M. BEMISS, M. D., Professor of Theory and Practice of Medicine and Clinical Medicine, University of Lou-

isiana, etc. [Every doctor interested in the subject of yellow fever should procure this monograph.] (Reprint from the *N. O. Medical and Surgical Journal*, November, 1882.)

The Treatment of Acute Eczema. By GEO. H. ROHE, M. D., Professor of Hygiene and Clinical Dermatology, College of Physicians and Surgeons, Baltimore, Md., etc. [A short treatise on this obstinate affection.] (Reprint from the *Medical Chronicle*, 1883.)

Experimental Researches on the Tension of the Vocal Bands. By F. H. HOOPER, M. D., Assistant Physician to the Clinic for Diseases of the Throat, Massachusetts General Hospital, etc. [This is an excellent study of the action of the thyro-cricoid muscle, and of the expiratory blast of air, and every one interested in the study of laryngology should procure it. The studies were made from experiments performed in the physiological laboratory of the Harvard Medical School.] Pp. 20.

The Ethical Problem as Demonstrated by Local History. By JOSEPH HOLT, M. D. [This address was delivered by the President of the Society before the N. O. Medical and Surgical Association, December 2d, 1882, reviewing the work done by that body during the nine years of its existence.] (Reprint from the *N. O. Medical and Surgical Journal*, January, 1883.) Pp. 11.

Clinical Lecture on the Mechanical Treatment of Caries of the Lumbar Vertebrae. By M. JOSIAH ROBERTS, M. D., Associate Professor of Clinical and Operative Surgery in the New York Post-Graduate School, etc. [A very practical and instructive lecture on this serious disease. Dr. Roberts has paid much attention to this branch of surgery, and all his remarks upon it are well worth reprinting.] (Reprint from the *Lancet*, London, January 27, 1883.) Pp. 7.

A Case of Hysterectomy, With a New Clamp, for the Removal of Large Uterine Tumors. By H. P. C. WILSON, M. D., Gynecologist to St. Vincent's Hospital and the Union Protestant Infirmary, Baltimore, Md. [In this paper Dr. Wilson relates the details of one of his cases, and in explaining the method of his clamp exhibits his well-known inventive powers. The clamp seems to be all that he claims for it.] (Reprint from the *American Journal of Obstetrics and Diseases of Women and Children*, April, 1883.) Pp. 12.

The New York Code of Ethics. By CHAS. A. TODD, M. D., St. Louis, Mo. [A light protest against the action of the

New York State Society in reference to the so-called "new" code.] (Reprint from the *St. Louis Courier of Medicine*, April, 1883.) Pp. 6.

A *Few Observations on the Use of Chloroform in Obstetrical Practice*. By N. C. GHENT, M. D., Belton, Texas. [This excellent little treatise was read before the Texas State Association at its 1883 session, and was received with much favor. The writer fully believes in the frequent employment of the anæsthetic in the second stage of labor, and does not agree with those who find it dangerous in this condition. He never gives it in natural labor between the uterine contractions, but always during the pain, and believes that it assists greatly in preventing perineal rupture.] Pp. 20.

A *Clinical Study of Syphilis of the Eye and Its Appendages*. By LEARTUS CONNER, A. M., M. D., Detroit, Mich. [A study of some interesting cases.] (Reprint from the *American Journal of the Medical Sciences*, April, 1883. Pp. 12.

Editorial.

Hydrochlorate of Cocaine.—If the anæsthetic property of hydrochlorate of cocaine is as powerful as it seems to be, its discovery will mark a new era in the history of ophthalmic surgery. None but those who are daily occupied in this department of surgery can fully appreciate the boon to suffering humanity and to the operators that must result from such a discovery. The trans-Atlantic medical press, as well as our own, are daily accumulating a mass of facts which so far all tend to substantiate the claims of this new discovery. Operators all over the country, as fast as they can procure the drug, are giving it an extensive trial, and are as a whole extravagant in their praise of its wonderful effects. There is very little of the drug in the market as yet, and the demand being so much in excess of the supply makes it very costly. But our ever progressive pharmacists, Mr. T. Roberts Baker, Mr. Hugh Blair, Messrs. Polk Miller & Co., through friends in New York, procured a part of the small supply in that city. Early in November, we were invited by Dr. McGuire to visit St. Luke's Home for the Sick and observe the effects of the drug upon a case of pterygium. At intervals of five minutes, two drops of a four per cent. solution were dropped into the eye until six drops had been used. When the first drops were put in, the patient was asked if he experienced

any pain. He replied that there was just the least appreciable grating. This quickly subsided, and the other drops produced no discomfort whatever. At the end of about twenty minutes from the time that the first drops were put in, the cornea and conjunctiva could be touched without producing the slightest pain or even flinching. When this was found to be the case, the pterygium was picked up with a pair of sharp, rat-toothed forceps, and dissected off with scissors. The patient said that he was conscious that something was being done, but could not say that he was conscious of pain. In the opinion of all who witnessed the experiment the result was wonderful, and it promises, as we have said, to mark a new era in the history of ophthalmic surgery.

The same day, in a case of small fatty tumor of the neck, Dr. McGuire injected under the skin covering the growth four minims of a four per cent. solution, and afterwards rubbed the skin covering the tumor with the solution for about eight or ten seconds. The tumor was then removed with the knife and forceps, and the pain was so slight that the patient could not be convinced that an operation had been performed, until he examined the site of it with a mirror.

Dr. Joseph A. White, of this city, has also been using the anæsthetic with great satisfaction in his eye surgery practice.

Laparotomy for Volvulus.—The *Gazzetta degli Ospitali* reports that Dr. Medini performed laparotomy in the Ospitale Maggiore of Bologna on the 19th of April last, for twisting of the intestine. The operation was quite successful, and the patient (a male, aged sixty-three), may be considered cured. Notwithstanding the manipulation required to disentangle the intestinal coils, and to separate the adhesions between them, the case progressed without serious symptoms.

Reindeer Tendons in Surgical Practice.—In the *Russkaia Maditzina*, No. 5, 1884, p. 118, Dr. Putiloff, of Omsk, Siberia, recommends threads made of reindeer tendons (used by Ostiasks for sewing their boots, coats, etc.), as a substitute for catgut in surgical practice. The author tried this material (after treatment by ether, to remove fatty acids, and by a five per cent. solution of phenol in absolute alcohol) in a case of epithelioma of the lower lip. The sutures underwent complete absorption by the end of three days. As the author states, the strength of these tendon-threads is very considerable.—*News and Miscellany.*

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Original Communications.

ART. I.—Cocaine, the New Local Anæsthetic. By JULIAN J. CHISOLM, M. D., Professor of Eye and Ear Diseases in the University of Maryland, and Surgeon-in-Chief to the Presbyterian Eye, Ear and Throat Charity Hospital, etc., Baltimore, Md.

In the New York *Medical Record* of 11th October, 1884, was a letter written by Dr. Henry Noyes, who was attending the Ophthalmological Congress at Heidelberg. In this letter he mentions an experiment which he had witnessed, of the marvellous effects of the muriate of cocaine as a local anæsthetic in eye operations, an accidental discovery of a medical student of Vienna named Koller. He stated that a few drops of a two per cent. solution, when placed in the eye, would in a quarter of an hour suppress common sensation, so that operations could be performed without pain. The unqualified praises of its efficacy from so well-known a source induced many throughout the United States to test for themselves the pain-controlling power of the cocaine solution.

I succeeded in obtaining two grains from New York, and making a two per cent. solution of the salt in water, put it at once to trial. My experience with it in the past five weeks, in upwards of fifty cases, most of them serious eye operations, confirms all that has been said of it by other surgeons, and proves the new drug to be one of the most valuable acqui-

tions to the *materia medica* of modern times. By common consent this new friend has been placed in the royal family group with quinine, opium, mercury, the bromides, and iodine. As an anæsthetic for surface surgery, it is a great advance over chloroform, ether and ethyl, or any other known anæsthetic; for with its use there is no element of danger. It seems to be incapable of producing injury, even if profusely used on a part, and its expense will be a protection against waste. What it does, (and we can nearly say, what can it not do?) in alleviating pain, it accomplishes for the part upon which it has been put, without in any way disturbing the rest of the body. The privilege of having the patient talking to the operator while incisions, otherwise very painful, are being made, and not have the passage of the knife through the living tissues arrest or even disturb the current of conversation, is something so near the marvelous that I can well understand how one might say, I would rather see that before I believe it.

I have used the cocaine sufficiently often to know that when a few drops of a two per cent. solution are put on the eye and repeated every three minutes, precaution having been taken to recline the head in such a way as not to let the drops run out of the eye, in fifteen to twenty minutes the pupil will be found dilated—an evidence that the solution has permeated all the tissues, including the cornea, and has even entered the anterior chamber of the eye, and therefore is acting upon the iris with which it is being brought into contact by imbibition. The dilated pupil is the sign that all parts of the eye touched by the solution have lost temporarily the power of experiencing pain, and that they may be cut or otherwise operated upon with no personal inconvenience to the patient. *Experience shows that the cocaine solution will exercise this pain-preventing or subduing power on or in any part of the living body possessing the power of absorption.* The mucous surfaces seem to be the most readily influenced, but delicate cutaneous surfaces, or more especially where the skin is broken, as in bruises or ulcers, will exhibit equally sedative effects. If the hardened skin is softened by a poultice, local anæsthesia is induced by the cocaine application. The

same marvelous effects are secured if a few drops of the cocaine solution is injected *under* the skin. Wherever it comes in contact and diffuses itself it exercises its wonderful power as a pain-killer, to the admiration of the operator and the gratitude of the patient.

Its controlling action over the sensation of mucous surfaces was first recognized when it was used in a spray to allay the irritation of the throat in laryngoscopic manipulation. Those who used it in this connection seem not to have appreciated the value of the drug. The throat had been sprayed for months by a few specialists in throat troubles without exciting comment. Because it made a throat less irritable, Koller thought that it might also make an eye less sensitive to manipulation, and hence he tried the experiment. This proved to be the match which fired the minds of the surgeons of the whole world. The eye experiment was brought before the Ophthalmological Congress, in session at Heidelberg. Two weeks afterwards the first notice to American surgeons appeared in the New York *Medical Record*, and on the very next day the eye surgeons of the metropolis were at work with it. One single day of trial at the Eye Hospital in New York city satisfied the surgeons that the great local anæsthetic had been found, and they lost no time in letting the world know it. Within a week numbers of surgeons in various parts of the country had verified in every particular the unqualified praises which had accompanied cocaine as an anæsthetic in its very introduction to the medical profession.

With its great anæsthetic action is associated the rare quality of the unirritating nature of the solution. When repeatedly applied to the most sensitive of mucous surfaces—the conjunctiva—it produces no injection, no redness, and no uneasiness. This negative, non-irritating quality, in connection with its pain-subduing power, is exhibited on any surface upon which it is applied, whether it be the eye, ear, nose, mouth, throat, vagina, urethra, rectum, upon the cutaneous surface, or when used by injection under the skin. As it produces no discomfort while doing its miraculous work of overpowering common sensation, its use in medicine as a pain-killer must become universal.

Eye surgeons are active members of the medical body. They did not keep to themselves the new discovery, but without delay they hastened to urge medical men to see for themselves the miraculous qualities of the new addition to the *materia medica*. Other specialists, encouraged by the eye surgeons, soon proved by experiments that cocaine was the power for which they also had long been seeking. The general surgeon was not far behind in the race to prevent pain to those who sought his services. He also found that the muriate of cocaine would serve him in a thousand different ways, to make painless operations which otherwise would be very painful.

No drug has ever received the unqualified endorsement of so many physicians in so short a time. It is not yet two months since we first heard of it, and hardly a medical man can be found who does not know something of the new discovery. Its praises are being sung by the public as well as by the medical profession, and cocaine is everywhere hailed as the marvelous discovery of the age. The whole world may well join in praises to the Giver of all good for permitting us to know that in a simple plant this hidden power for the amelioration of human suffering has been revealed.

There is but one alloy at present to cocaine—its expense. The very best quality of the leaves of the coca, *erythroxylon*, contains only fourteen grains of cocaine to the pound, and the process of extraction is very expensive. It is said that the salt, when hid away in the leaves, at the present market rate of the crude article in the United States, is even there worth seven cents per grain, and that it will be some time before the price is reduced much below fifty cents per grain, at which it is at present held. Fortunately, one grain dissolved in fifty drops of water, makes the two per cent. solution, and of this ten drops carefully used will put the eye to sleep; so that after all, its cost in eye surgery will hardly be more than when chloroform or ether is used by inhalation, to say nothing of the absence of danger, with the accompanying anxiety of patient and friends when the general anæsthetic is administered. The cost, even if not much reduced, can never prevent its use. We are told that the leaves are culti-

vated to the extent of 40,000,000 pounds in Peru and other parts of South America, where it is the common tea beverage of the inhabitants. As the price of the leaves in Peru is quoted at twenty-five cents per pound, there is no reason why the supply should not equal the rapidly-growing demand for the new extract. Science will no doubt find some less expensive way for isolating the alkaloid. It is sincerely to be wished that the muriate of cocaine may become so cheap as to be within the reach of the poorest of our people, so that every family may find it a useful thing to keep, along with paregoric, syrup of squills, and other equally prized household goods, to assuage the pain of bruises, the tooth-ache and ear-ache of children, and as an innocent and effective gargle for sore throat, for if swallowed no harm comes of it.

My experiences with cocaine have proved that, as a local anæsthetic of the most benign and powerful order, it can be relied upon for the relief of nearly all eye pains, and for the prevention of suffering in many eye operations. The crowded dispensary and the ample ward accommodations of the Presbyterian Eye, Ear and Throat Charity Hospital gave me special opportunities for testing on an extensive scale the local anæsthetic action of cocaine in eye surgery, and already I rely on it for many cases for which chloroform or ethyl was used six weeks since. The method of application in all cases is similar. I have used a four per cent. and am now using a two per cent. solution of the muriate of cocaine. One or two drops of this solution is put between the lids, the patient reclining his head backward, so that the drops will not run out of the eye and escape on the cheek. At intervals of three minutes I renew the drops. In from fifteen to twenty minutes the pupil dilates very decidedly, by which time absorption of the drug into the eye tissues has been free enough to deaden all surface feeling, and also to diminish to such an extent the sensation in the deeper tissues, that severe pain is not experienced when they are incised. The eye will not exhibit any distress or symptom of irritation from the application. The extent of the anæsthesia varies with the length of time of the application and the readiness with which it has been absorbed. For most eye operations, especially for those

of the conjunctiva and cornea, the absorption from the surface goes sufficiently deep to give immunity from pain during their performance. As the drug is known by experience to act as well on the cellular tissue as it does on the surface, it is only necessary to instil it into the wound and wait a few minutes when a deeper action can be obtained, so that deeper parts can be painlessly divided.

In eye operations the comfort to the surgeon, as well as to the patient, is incalculable. Only think of the luxury of visiting the wards of an eye hospital, as I do after a Waterloo day in the operating room, and find patient after patient, just operated upon, not only in his proper mind and in most comfortable condition, but cheerful and even gay, having suffered no pain, bodily or mentally, and with no nausea or vomiting, as was constantly the case six weeks since under the old anæsthetics—chloroform or ether; and then day by day trace the convalescence, which seems to have started with the application of the first bandage, and progressed steadily to the cure without one moment of suffering at any time! It would really seem, as far as my experience of six weeks would permit me to draw conclusions, that the anæsthetic drop, in preventing pain during the operation, continued its watchful protection over the eye, thereby keeping away inflammatory attacks. Of the seventeen cataract extractions so far operated upon by me under cocaine, none have had any trouble whatever. All of them look upon the cataract operation and its painless convalescence as an agreeable episode in their lives, and are brimfull in their expressions of satisfaction in talking about it.

The old but trite surgical proverb, *ubi irritatio ibi fluxus* is the well-known law of the living economy. Keep the irritation away and the flow of blood, with its inflammatory congestive processes, will not occur. Opium, the great soother, will ever do good work as the great antiphlogistic antidote. Cocaine seems ready, as a local remedy, to go hand in hand with this king of drugs and fill the *role* of inflammation preventor. Its application makes the part less vascular, as well as less sensitive.

As the local effects of the two to four per cent. solution of

the muriate of cocaine on each case is duplicated with singular regularity, a description of one case in a series will suffice to indicate its utility and the character of the eye operation in which it will be found valuable. I have used the four per cent. solution only a few times; the two per cent. I have used daily. Neither irritate the eye surface. It may take a few more of the drops, and occupy a few more minutes, under the two per cent. solution. This might be inferred for the stronger drop, although in my experience I have found the two per cent. solution produces complete anæsthesia, and it is only half as expensive.

The removal of foreign bodies from the cornea seems to have been the tentative case with most eye surgeons. It was this first step that established confidence and induced its trial for more serious cases, in which deeper tissues were implicated. In aiding the removal of foreign bodies its action leaves nothing to be desired. The following case may be considered the type of the many which have daily followed it:

A. M., aged twenty-seven, a mechanic, in chipping metal received a small scale of brass into his eye. His fellow-workman had made many attempts to get it out but had not succeeded. During the night his eye had given him much pain, and now it is in a very angry condition. The small metallic fragment is embedded in the cornea, near the pupillary area, and has already excited a hazy surrounding from self infiltration—an evidence of the great degree of irritation which has been already produced. The whole eye is pink, with scleral injection, and he is evidently suffering severely. The eye waters freely, and so annoying is the light that he can with great effort keep the eye open only long enough to let me locate the foreign body. He complained much when the lids were stretched apart, and the instant the needle was brought in contact with the cornea, to pick out the piece of metal, he shrunk back with a cry of pain, rolling the cornea upward under the lid. Formerly, knowing that the foreign body must come out, I would have renewed the attack, notwithstanding his suffering, until, by some successful plunge of the needle-point, the metallic fragment would have been lifted from its position; or, if I found the patient too unruly, I would have administered some general anæsthetic—chloroform, or more recently the bromide of ethyl—and taken advantage of the narcosis to remove the foreign particle. Un-

der the new order of things how different was the procedure! With head reclining upon the back of a chair, so that the face looked upwards to the ceiling, two drops of the cocaine solution were put in the inflamed eye, and this was repeated every four minutes for four applications. The operation was now resumed, but how different the behavior of the patient! In his present boldness he no longer recognized himself. He found himself staring out of the window or directing the eye as I requested him to do, without effort or discomfort. The light no longer annoyed. I placed my finger upon the injured cornea; his face did not change expression, nor did he exhibit any uneasiness whatever. I had no trouble in fixing the eye, as I desired to throw most light on the foreign body, and with the staff needle proceeded deliberately to turn the piece of metal out of the bed which it had made for itself in the surface of the cornea. All this was done with as little pain to the patient as if I were removing a fragment of dirt from his coat. He felt the scraping of the front of the eye, but it was a painless pressure. His pupil had dilated under the effects of the drops, and I still found it partially so the next day. The inflammation rapidly subsided, and within twenty-four hours he was ready to resume work.

If one could see the injury which the surface of the cornea sustains under the crude efforts by a fellow-workman to remove a foreign body, especially with a restless patient, where the epithelial surface of the cornea is plowed up by the point of a pen-knife at every upward movement of the irritable eye-ball, the value of the cocaine eye-drop in such cases for the steadying of the eye can be fully appreciated. This two per cent. solution of cocaine should be kept in every workshop, and will be needed daily to remove foreign bodies, so very common an accident is it. Its use will save both pain and time to the mechanic.

The next series of eye cases in which the local application of the cocaine solution proves itself invaluable is in the treatment of *irritable ulcers of the cornea*. Such cases form a very large class in dispensary practice, and especially among the eye diseases of children. Phlyctenular keratitis with superficial corneal ulcerations cause much suffering among the growing population. Any bland, innocent application, which promises to assuage the painful disease of childhood, espe-

cially the suffering of the very little ones, can not fail to be a most welcome visitor.

The following case, selected from many, will show the action of cocaine in corneal ulcers:

Miss M., aged sixteen, of scrofulous diathesis, has had repeated attacks of phlyctenular corneal inflammation, and has kept herself voluntarily in the dark for weeks at a time, not being able to stand any light whatever. The darkest smoked glasses were no protection when suffering from an eye attack. She not only sought the dark corners of the room, but would sit with her eyes buried in her handkerchief or in a pillow day after day, the inflamed eyes being rebellious to the usual medication of atropia with the yellow oxide of mercury ointment and the internal use of cod liver oil and iron. For six years she had been under my professional care from time to time, with intervals of several months of apparent cure, followed by relapses or recurrent attacks of the most violent irritating painful corneal ulceration. Recently she was brought to my office with one of these violent attacks, in which she could not keep her eye open long enough to permit a satisfactory inspection. As I had previously experienced the comfort which cocaine offers in this annoying class of eye troubles, I did not hesitate applying it to her eye with the expectation of quieting promptly the irritation, although on many former occasions, before cocaine was known, it had defied my utmost efforts. A small quantity of the two per cent. solution of the muriate of cocaine was given, with instructions to drop it into the inflamed eye several times a day. Its action was as prompt and as complete as I could have desired. She visited me the next day, and walked into my bright consulting room with eye widely opened and without her dark glasses. The eye no longer watered; and the injection had very much diminished. In twenty-four hours it had already well advanced towards convalescence. She reported prompt relief from the cocaine drops.

A third class of cases in which I have now an extensive experience *is in the operation for squint*. Within the past five weeks I have straightened twenty crossed eyes in children and in adults—in all cases with very little inconvenience to the patient. After twenty minutes of absorption of the cocaine drops, no painful sensation has been experienced in the cutting of the conjunctiva, although some have experienced

a mitigated pain in the dissection of the rectus tendon from the sclerotic coat of the eye. In no case has the pain been severe, or of a character that could not be easily borne, and in many cases there has been no pain whatever. All have felt a sensation of pulling when the hook under the tendon drew forward the muscle. Many of my cases were in children in whom the performance of the tenotomy did not excite a cry—an evidence that the pain of the operation must have been either wholly controlled or so much subdued as not to frighten these little ones. For the past two years I have used general anæsthesia by bromide of ethyl in all such cases. Since the introduction of cocaine I have only used ethyl once, in the case of a frightened child who persisted in crying, thereby washing out the cocaine solution as rapidly as it was put on the conjunctiva.

The following selected case will show the local anæsthetic action of cocaine during the operation for correcting crossed eyes:

Miss W., aged 9, a very timid little girl, was brought to my office to have the ugly cast in her eye relieved, a deformity of four years' standing. Both mother and child were very nervous over the operation. I told them I could operate by a new method without going to sleep and without causing pain. The little girl was induced to lay on her back on my office lounge, with head low, and into the squinting eye I put three drops of the two per cent. cocaine solution. She prepared to cry as the drops touched her eye, but finding no pain from the application, she was soon quieted. In a few minutes the drops were renewed and their application repeated every five minutes for twenty minutes. The pupil became well dilated, and the eye was anæsthetized. With faltering steps she was persuaded to get into my operating chair. I purposely touched the eye into which no drops were put, when instantly both hands flew up to the face with a scream. I assured her that I was not going to operate upon that eye, but upon the other one, which I knew she had no sensation in. I then touched the squinting eye. Both hands again flew up. When I asked her if the touch had really hurt the eye, she replied no. I renewed the touch to assure her that the eye now had no feeling. This satisfied her. I advised her to put her hands behind her back and lay down upon them, so that they could not be in my way

while I was operating. She did as I requested, when I commenced the operative procedure. The eye speculum was introduced to separate the lids, the conjunctiva was seized, and with a sharp scissors an incision was made into it, the child indicating, so far, rather astonishment than pain. When the hook was inserted into the wound she felt it, and became a little uneasy, but a few words from me soon quieted her. The operation was completed by dissecting the tendon from the eye-ball. I then reintroduced the hook, to be sure that no thread or tendon remained undivided. This completed the operation, but the little hands still remained behind her back. She was told now to get up, which she did with alacrity. When asked whether I really had given her pain, she acknowledged that she was frightened but not hurt, and that she had felt the cutting but had not felt any pain with it.

Upon many children and upon several adults the cutting of the squinting muscle under cocaine has been called by them painless.

Cataract extractions show, in a marvellous way the surpassing excellence of this local anæsthetic. To remove a foreign body from the cornea, to cut off a pterygium from the eye surface, to open a Meibomian cyst of the lid, to split a puncture for tear-drop—these are all operations upon the surface of the eye, and one would expect from analogy that the local anæsthetic action of cocaine could make all of these operations comparatively painless. But now we have to cut the eye-ball open; to put instruments inside of the eye chambers; to remove a part of the iris, one of the most richly supplied tissues with nerves in the whole body, and yet the cocaine solution has stood this crucial test for inducing perfect local anæsthesia during cataract operations. I have within the past month operated upon nineteen cases of cataract under cocaine, seventeen by extraction and two for the cutting of capsular deposits. In each of these cases the two per cent. solution of cocaine was used upon the eye for from twenty to twenty-five minutes, when the operation was commenced. In no case was any pain felt when the cataract knife transfixed the cornea, and, cutting its way out, made the large wound through which the opaque lens was to be extracted. In some cases the cutting of the iris was com-

plained of. In many it was not felt. The dilated pupil caused by the absorption of the cocaine solution, indicated its presence in the eye-ball, and its anæsthetic effect was experienced upon the iris which was bathed by the solution, although necessarily in a diluted form. The cutting of the capsule and the escape of the lens was a painless operation. The ease with which the eye-ball could be moved about by the fixation forceps was delightful to the operator. There was no pulling in opposite directions by the patient, and therefore much less risk of losing vitreous. The gratification of the patient, seeing immediately after the operation is completed and before the eyes are bandaged, were great advantages over the use of the general anæsthetic. Then being put to bed with no pain in the eye, and without nausea or vomiting; and best of all, the steady progress towards a cure which all of my cataract patients have experienced, warrant me in the statement that for cataract extractions it is truly a God-send to the blind. One case from this very large list will enable the cocaine solution to speak for itself.

A. J., aged 69, blind in both eyes with cataracts which have been forming some time. It is only within the past six months that he has been totally blind in the right eye, and for two months has not been able to recognize objects with the left. He has good light perception in each eye. His general health is excellent. The cataracts were of a grayish-brown color, indicating large nuclei and but little cortical substance. He was one of a batch of six cataract patients, all of them preparing to undergo operation by having the cocaine drops put in the eye every three minutes. When placed upon the operating table the right pupil was found fully dilated, an evidence of the free absorption of cocaine and the anæsthetized condition of the eye-ball. For the benefit of a number of physicians who were present to see the effects of cocaine in eye operations, I touched the eye in which no drops had been put. The immediate closing of the lids resented promptly the intrusion. In the eye with dilated pupil I thrust my finger and rubbed it over the cornea without an evidence of discomfort on the part of the patient. I seized the conjunctiva rudely and shook the eye-ball without causing pain. The eye was evidently under the full effects of the anæsthetic. The speculum was inserted, the eye secured with the fixation forceps, and the eye-ball

transfixed with the cataract knife. While the knife was cutting its way out through the cornea, I asked the patient if it hurt him. He responded that he was not aware that I was cutting him. At my request he looked downward, exposing the wound in the cornea, through which I introduced the iritic forceps, and drawing out a large piece of the iris, cut it off with a scissors. He still expressed himself as suffering no pain, nor did he move when the iris was being drawn out. While the lens was being squeezed through the corneal wound and the surface of the eye stroked by the rubber curette, his face gave no expression of any pain whatever. He said, when the operation was finished, that it had been to him a painless one, and he gave no evidence to the number of physicians who were watching him closely that he had experienced any discomfort whatever during the surgical procedure. A drop of a solution of pilocarpin (gr. iv to 3j) was placed in the eye and the usual bandages applied. The whole operation, to the removal of the patient from the operating table, did not take more than five minutes.

One after another the six cataract patients were placed upon the table, and each in turn exhibited the same absence of pain when the cornea was opened and the lens removed. It was a wonderful exhibition—persons talking to you while their eyes were being cut open, and not feeling it. The progress of all of these cases towards a cure was equally remarkable.

I had at one time, in contiguous wards at the Presbyterian Eye, Ear, and Throat Charity Hospital, sixteen cataract patients, all recently operated upon under the sedative influences of the cocaine drop. As I visited each in my daily rounds it was very gratifying to receive from each of them one response. They were all right. They had experienced no pain during the operation, and had no suffering during the treatment. When the bandages were finally removed after a week of confinement, all had good pupils and had sight restored. To the many old persons blind from cataract, the dread of chloroform and the fear of pain without it, deter them from trying to regain their sight by operation. Now that the cataract extraction is made painless by the simplest and most innocent procedure, this great cause of anxiety is removed, and the hope of seeing again can be

promised to many an anxious patient without any risk to life or fear of suffering.

Although I have had one enucleation of an injured eye-ball and two optico-ciliary neurotomies for absolute glaucoma within the past fortnight, I used the general anæsthetic in all of these cases. I might have used the cocaine injected into the corneative tissue behind the eye-ball, as the local anæsthetic, but it did not occur to me to try it in this manner, and I knew that its surface absorption would not be sufficient to effect the deep tissues of the socket. On another occasion I may try the cocaine injection preparatory to performing these deep operations.

The local anæsthetic, cocaine, which will hereafter be so liberally used for preventing pain, makes eye surgery nearly perfect. It will give immense comfort to the operator and relieve all anxiety to the patient. The doctors and the people hail its advent as one of the greatest blessings to the human race.

ART. II.—**Evolution of Antisepticism.**—(Unconscious Asepticism—Listerism—Iodoformisation.) By M. A. RUST, M. D., Richmond, Va.

During the last meeting (September, 1884) of the State Medical Society of Virginia, Dr. Harrison read an ably written paper on "Modern Treatment of Wounds," substantially a clear epitome of antiseptic surgery as now practiced in the great hospitals.

Salient in the discussion which ensued were the remarks of Dr. Hunter McGuire. Fully recognizing the value of antiseptics in surgery, and the necessity of its application in the impure air of hospitals and crowded cities, he inclined to exempt the Virginia country doctor from the laborious task of this complicated method. To the country doctor, he said, it is often impossible to carry out listerism with all its tedious minuteness. Moreover, it is generally unnecessary, the pure country air in Virginia being in itself aseptic. If strict cleanliness be enforced—cleanliness in its full scientific sense—our country surgeons will very rarely have to lament a case of pyæmia.

I was about to rise and make some remarks, when I considered that, being slow of speech, and the meeting drawing to a close, it would be as well to keep my wisdom to myself.

Like the herbaceous cud in a ruminant, that bit of wisdom I swallowed comes up again here in a more digested shape.

I fully understand and appreciate the sense in which Dr. McGuire's remarks were made. The strength of a physician, like that of other men, has its physical limits. Moreover, if Dr. McGuire tells us that pyæmia is of rare occurrence in the pure country air of Virginia, we may rest assured that it is a fact. No person is in a better position to know; a field of observation on this subject has been open to him wherever the iron rail furrows Virginia soil.

But I beg leave to approach the subject from another—from a moral point of view. I hold it to be our religious duty to proclaim the maxim, that a wound, small or large, shall at no time, and at no place, be left without some efficient aseptic protection.

If, in the midst of our honest rural population, a person has slept undisturbed, night after night, for ten consecutive years, with doors open, and watch and money-purse lying on the table, it does not follow that in the eleventh year a sly thief may not creep in through the open door.

Enough, indeed, has been said and written in the last ten years on antiseptic treatment. But the human mind is so constituted that, in order to make a lasting impression upon it, even scientific truths generally require frequent reiteration and representation in a fresh light. By daily repetitions we see the most stupendous absurdities harden into beliefs from which all the missiles of reason rebound.

The time has past when the cause of pyæmia was an open question.

The causal connection of certain microbes (*microsporon* or *micrococcus septicum*?), with the manifold evils and disasters (inflammation, suppuration, œdema, phlegmons, erysipelas, sloughing, hospital gangrene, etc.) which threaten the wounded and operated, is to-day a well-established truism. It is likewise a recognized fact that these omnipresent microbes enter the wound from without.

Thirdly, it is a glorious, indubitable verity that, thanks to Lister's discovery, the surgeon has it now in his power to erect a barrier against the intrusion into the wound of such microscopic rabble.

Even from the first, Listerism has saved more human lives than any other discovery or progress in surgery. It was, properly speaking, not a discovery, but a thoughtful application of strictly scientific principles to the ends of surgery.

In pre-Listerian times, when a hospital surgeon only lost 30 per cent. of his major operations or amputations, he was regarded as lucky; the unlucky ones lost 60 to 80 per cent. The average mortality in the great hospitals* was about 40 per cent. In private practice it was not so high.

The probability of an existing correlation between hospital impurity and the disastrous complications arising among the wounded was never absent from the minds of the best surgeons, and one must acknowledge that, in their efforts to enforce cleanliness, the English hospital surgeons stood foremost.

But what was it, in impure air, that affected the wound?

A proper answer to this question could only be given by biology, which still lay beyond the surgeon's ken.

We were sufficiently advanced to deride scornfully the old godly faith in the healing virtues of salves, tinctures and decoctions; and we maintained that shielding the wound against contact with atmospheric air was the aim and end of all the modes of dressing wounds. And if the vexatious question arose "How did atmospheric air affect the wound?" we were not at a loss for an answer. Of the explanation we gave, I only recollect that it had a somewhat metaphysical flavor.

So much we knew—that wounds and injuries to which atmospheric air had no access (fractures with unbroken skin, tenotomy, myotomy) were never attended with suppuration, and never fraught with the dangers of open wounds. Sub-

*In a paper of *Leibnitz*, dated 1714 (recently discovered and published by Dr. Fischer), that philosopher calls a hospital "*Seminarium mortis and Thesaurus infectionis*." In the same paper Leibnitz recommends, instead of hospitals, the erection of detached wooden barracks. We must turn over many leaves of history before this healthful idea again emerges.

sequently we also learned (Stromeyer, Klebs) that in gunshot wounds, whenever the track of the ball is so long and narrow, or by other circumstances so shielded, that atmospheric air has no access to the deeper portion of it, the corresponding tissues do not show inflammation, suppuration, or any other morbid alterations. From this we could again draw the conclusion that the suppuration in the portion of the track nearer to the surface is brought about by outward irritation.

But what, at that time, we did not know, was, that a wound, fully exposed to atmospheric air, would heal without any delays, like a subcutaneous wound, if the air surrounding it were previously made to pass through an incandescent tube, or filtered of its floating matter by some other method.

This great truth was laid at our very doors by contemporaneous experiments of eminent scientists (Schwan, Schröder, Dusch, Helmholtz—1836–1860—and subsequently by Pasteur, Tyndall, and others), demonstrating how organic matter, placed in filtered or purified atmospheric air, is kept free of all fermentative and putrefactive changes.

To grasp this truth, and make it subservient to his ends, was reserved for Lister.

Albeit we may trace from the remotest times a latent idea of asepticism underlying the various modes of treating wounds; the surgeon unconsciously trod with one foot in the right track.

We will take an example dating back from three to four hundred years. During the sixteenth century the established treatment of gunshot wounds was the pouring of boiling oil into the track of the ball.* This was indeed effec-

*Before the sixteenth century we notice a remarkable silence on the subject of gunshot wounds. The injury being an entirely new one—not even mentioned in Galen—the surgeons at first must have been at a loss to know what to do, and on what to ground a theory.

When, in the early part of the sixteenth century, in consequence of the general introduction of fire-arms, gunshot wounds became of very frequent occurrence, presenting a multiplicity of grave complications, not only of a local, but of a constitutional character, the theory became established that gunshot wounds were poisoned wounds, poisoned by the powder which was

tive, though unconscious antisepticism. If the patient survived the immediate consequences of the treatment, he had a fair chance of recovery; by the boiling oil all micro-organisms were thoroughly destroyed, and the slough or scab which formed was an efficient aseptic covering. If, in course of time, we find Ambroise Paré, who was the first to combat this barbarous treatment—dressing a certain class of wounds with *unguentum ægyptianum* (a salve composed of equal parts of alum, verdigris and blue vitrol)—we may perceive in this another manifestation of unconscious antisepticism.

Space will not admit of more examples, and we pass to modern pre-listerian time.

Unconscious antisepticism (or asepticism) in its evolution had arrived at the point where we professed that wound-dressing had for its main object protection of the wound against atmospheric air and certain *miasms* contained in the air.

During the first half of this century French prestige controlled the surgical catechism. The established orthodox

supposed to enter into the track with the ball. That poison had to be destroyed, and boiling oil was the chosen means.

Giovanni Vigo, an Italian surgeon of great renown and authority, in his treatise on gunshot wounds (Rome, 1515), the first of the kind which ever appeared, was the expounder of this theory.

In 1536, when Ambroise Paré was a young army surgeon, he invariably treated, so he himself narrates, his wounded, as all the other surgeons did, with boiling oil. Though shocked by the pain he inflicted, he did not dare to try a different treatment. But it so happened that one day, after a battle, he had so many wounded that his supply of oil gave out. He made a salve of grease and turpentine (unconscious asepticism again), and with it dressed the balance of the wounds. A great anxiety came over him. He could not rest, he says, the whole night, haunted with the fear of finding the next morning those patients, whose wounds he had neglected to burn, dead from the effects of the unchecked poison. But, lo! how gratifying was the surprise when he found them the next day infinitely better off than the others! From that day he resolved never again to torture the wounded with boiling oil.

In his treatise on gunshot wounds (*Methode de tracter les playes faictes par hacquebutes et aultres bastons a feu*, first edition, Paris, 1545) he dealt a deadly blow to the poison theory and the boiling oil. We have a long succession of editions of his writings—last edition by Professor Malgaigne, Paris, 1840.

treatment of wounds, as practised during the hospital period of my life (1845-52), f. e. in the Clinics of Paris by the great surgeons Roux, Velpeau, Nelaton, Iobert, etc, presented the following main traits:

(a) Washing the wound. (b) Spreading a piece of "linge fenêtré" covered with simple cerate over the wound. (c) Piling a thick layer of dry, hand-made lint over the fenestrated linen, several compresses on the top of it, and a roller to complete the dressing.

We will at once admit that this mode of dressing was the best for the time being. It had almost entirely done away with the notion of medicating the wound. Simple cerate, made of bees wax and olive oil into the consistency of honey, was, as the least irritating substance, selected to prevent the lint from adhering to the wound surface.

If for the successful treatment of wounds we postulate three essential conditions, viz.: (1st) Rest of the wounded part; (2d) free escape of the discharge; (3d) aseptic protection—we find that this mode of dressing fulfils our three conditions either very imperfectly or not at all.

(1st) *The rest of the wound* was greatly disturbed by the frequent dressing—once, twice or more daily.

(2d) *The free escape* of the discharge from the wound through the openings of the fenestrated linen, and the absorption of that discharge by the lint, was but imperfectly accomplished. A thick layer of pus could always be found between wound and lint, hence the necessity of frequent dressing.

(3d) The lint intended to filter the air may have retained some grosser particles of the passing air, but in fact it afforded no aseptic protection whatever. The cotton pad of later introduction was a great improvement on it.

Viewing with my eyes of to-day the details of this mode of dressing, I perceive them bristling with fallacies.

Sponges used over and over again without intelligent disinfection must necessarily become a hot-bed for the growth of microbes. By washing the wound with these sponges, dipping and redipping them in the basin held at the right of

the surgeon, the microbes enjoyed the opportunity of a free ride between wound, sponge and basin.

Fenestrated (perforated) compresses, made by cutting with scissors rows of small holes in a piece of linen—the work of Sisters of Charity in their leisure hours in the wards—helped to smooth the road for the transit of the ward-microbes to the wound.

Patent lint—already in use in England and America—was then nearly unknown in France and the rest of the continent. The French surgeons rejected it* Lint was picked from old half worn linen (shirts, sheets, table linen, etc.) furnished by hospital labor, traffic or charity.

In many households the worn-out linen was laid aside for this purpose. True it was a rule that such worn-out articles should previously be washed with lye. But could the surgeon, even when disposed, make an inquiry into the origin and genesis of each bundle of lint?

Baskets and trays loaded with sponges, lint, compresses, bandages, etc., waiters with fenestrated linen, covered with cerate, ready for use, all of it contaminated by exposure to the hospital air, were carried in the train of the visiting surgeon from patient to patient, thus dealing out, taking in and interchanging microbes at every station.

The dressing of the more important cases was attended to by the visiting surgeon himself daily, at the morning visit; the evening dressing by the "*Interne*," and minor wounds were assigned to the "*Externes*." With flying aprons and trailing bandages we gaily hopped from bed to bed, little aware that we were playing with fire.

I do not recollect having observed in any of the great hospitals a wound healing by first intention.

Suppuration was the natural order of things. Was it not regarded as necessary to the formation of new tissues and to

*There was a nice classification of lint, according to quality and shape, which the student was bound to know—quality differed when picked by fingers or scraped with a knife. In regard to shape there were *Plumas-seaux*: Long heavy filaments in a parallel arrangement. *Bourdonnets* and *Rouleaux*: Oval or cylinder form. *Boulettes* and *Pelotes*: Spherical or ball shaped, etc.

the healing of the wound? The rich flow of the creamy fluid from every wound was almost pleasing to our eyes. With all our familiarity with the microscope we never saw the colonies of micrococci which are present invariably, even in so-called *pus bonum et laudabile* taken from the surface of a wound or from a piece of dressing. Chassaignac in his treatise "On Suppuration" says that the great and difficult art of the surgeons is: *de bien diriger la suppuration*: we say to-day the great task of the surgeon is to prevent or suppress suppuration. Suppuration might be ranged amongst the infectious, preventable diseases, and in a wound the best and most laudable pus is—*no pus*.

Space does not admit even a summary of the various plans of treatment devised to improve or supplant the above described system. I will mention only one method which is remarkable in the following point: Exclusion of air, the leading principle of wound treatment, transmitted through centuries, is entirely cast aside, as if, after so many discomfitures, a fit of despondency had come over the surgical mind. I speak of the *open treatment of wounds*, which consists in leaving the wound free, only keeping it slightly covered with a wet compress.

Of the three cardinal conditions to a successful treatment of wounds: *Rest, free discharge, aseptic protection*—this method fulfils the first perfectly; there is no disturbance by frequent dressing. It comes up to the second condition if assisted, in certain cases, by incision and by drainage; as to the third condition, there is no attempt to comply with it, except by nature through the occasional formation of a scab.

Open treatment of wounds was, for the first time, methodically practised by Von Kern in the Vienna Hospital, 1807–29. Although it gained some distinguished disciples, it appeared to most of the surgeons a dangerous heresy. The belief in active medication and the domineering French influence were against it. It died with its author.

It was *Stromeyer* who in the German-Danish war of 1850 took up the idea of Von Kern, and astonished the surgeons with his splendid results. The new method quickly found

adherents. It attained its greatest success in military surgery, probably aided by the system of housing the wounded in barracks, tents, etc.

But in our great hospitals, no matter what methods were applied, pyæmia, erysipelas, etc., retained their full sway—the awful mortality could not be reduced. It often reached eighty per cent. of the major operations, and instances are recorded (Nussbaum, Volkmann, etc.) where all the operated died of hospital gangrene. The surgeon stood helpless and powerless amidst those appalling calamities.

Lister came—and all this belonged to the past. The modern miracle, scientific thought, at once put all those evils to flight.

“When eight years ago,” says Prof. Volkmann in his address to the London International Medical Congress, August, 1881, “I first started with antiseptic treatment, my last twelve patients with compound fractures had just died. I have since antiseptically treated 135 similar cases, 133 were discharged cured, and two died from other causes. The total number of patients in my surgical clinic in the last eight years was 35,000—3,000 major operations amongst them—and not a single case of pyæmia has occurred.”

Nussbaum, Billroth and others obtained similar results. *Lister* himself, at the very start of his antiseptic system, was able to show, from the Glasgow Infirmary, the following first fruits:

1864-66 in Glasgow Infirmary before antiseptic treatment.	} 35 major amputations, with 16 deaths.
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1867-69 in Glasgow Infirmary after introduc- tion of antiseptic treatment,	} 40 major amputations, with 6 deaths.
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The present mortality from major operations and amputations in the German clinics does not, according to good authority, exceed five per cent. on an average. This figure is supposed to be lower than that attained in private practice, where the surgeon has not always at his command the means and appliances offered in the hospitals. As we have already mentioned, in pre-Listerian times it was the reverse.

“Till a short while ago,” says Volkmann in the above quoted address, “the surgeon, after skillfully completing his

operation, was like the farmer, who after tilling his land submissively awaits the harvest, powerless against the elementary forces. To-day the surgeon is like the artist or manufacturer, of whom well completed work is demanded. Whilst he formerly enjoyed the privilege of being irresponsible as to results, the advance of science has now rendered him responsible."

The conviction that the surgeon has it in its power to prevent pyæmia has since 1870 been growing and spreading from year to year. Had this conviction existed at the time of the Garfield calamity, American inventive genius, aided by the sympathy and unbounded means of the nation, might have astonished the world by surrounding the White House with a filtering purgatory (desirable also in another sense), preventing the passage of parasites or microbes.

This conviction has become superlatively intense in Germany, as shown, among other things, by a judgment recently passed by the Supreme Court of the Empire (an institution analogous to the Supreme Court of the United States), confirming the verdict of the lower court against a surgeon who had treated, without any aseptic safeguard, a wound (a cut penetrating into the lungs) which ended fatally with pyæmia.*

No progress or discovery ever escaped opposition or attempts to derogate from its value.

Even Laenec's discovery, which, when I commenced the

*I will add that in Germany in any suit concerning supposed errors or mistakes of physicians in the exercise of their calling, judgment can only be passed in agreement with the written opinion of a Government Board of prominent physicians rendered after mature deliberation at their meeting.

It was only a meagre newspaper paragraph which came under my notice. The unfortunate doctor was somewhat stiff-necked. He grounded his defence solely on his unquestionable right to use such modes of treatment as he had been taught by the great masters and as he had successfully used during a practice of many years. He viewed antiseptic treatment as a new fangled method still in its experimental stadium, and did not feel justified in applying it.

The opinion of the court was, that whilst a physician or surgeon is free in the choice of his methods, there are limits to this freedom. He transgresses these limits when he disregards a scientific progress by means of which dangers to life can be averted.

The correctness of this view must be admitted, but in the shape of a judgment from the bench it is rather a strong dose.

study of medicine, was just introduced into practice, had its opponents.

To be sure it went very hard with the older practitioner, either to learn an entirely new art, or to borrow occasionally a young doctor's fingers and ears. But having once taken to the stethoscope, I never heard of any one who afterwards laid it aside.

When twenty-three years ago Wunderlich declared that for a correct diagnosis thermometry is as indispensable as stethoscopy, a great many regarded this assertion as an exaggeration. To-day no physician who has once used the thermometer intelligently would like to be without it.

It is different with Lister's system. Many a one who at first took it up enthusiastically, dropped it disappointed after a short trial. But it only so happened with those who "*mistook the outward visible sign for the inward spiritual grace.*"

Antiseptic treatment was by many supposed to consist in the mechanical execution of Lister's first directions with all their elaborate minute details. But that wearisome ritual was only a first tentative choice of means to an end, which Lister himself has repeatedly changed.

Invariable success only crowned the efforts of those who, penetrated with the "*inward spiritual grace,*" were at every instant, with every step and move, conscious of the aim to be attained.

Consequently we see during the whole of the last decennium a great variety of aseptic means used with more or less success: Chloride of zinc, salicylic acid, bismuth, tymol, corrosive sublimate, etc. Even toasted moss, dry clay (first heated and sifted), may serve and have served the purpose.

But whatever aseptic safeguard may be chosen to shield the wound, it does not alter the fundamental Listerian rule, that nothing, be it fingers, instruments or coat sleeves, shall approach the wound without having previously passed through a carbolic, corrosive sublimate, or other other purgatory.

Of all the various aseptic means recently devised, none has gained such a wide spread reputation as iodoform.

I must confess that, although fully convinced of the truth

of Lister's teaching, and aware of the new duties it enjoined, I hesitated at the thought of putting such complicated machinery into operation at every little wound. Besides, ten or twelve years ago the requisite materials were not obtainable in Richmond. The cotton pad and infrequent dressing set my conscience at rest and made me consider the wound, at least on biological grounds, aseptically protected.

But no sooner did I hear of the first trials with iodoform than I applied it. At first cautiously, afterwards boldly, to every wound which came under my treatment. After the first iodoformization the dressing was left in place from five days to three weeks. When changing became necessary, the soiled iodoform, without any washing, was gently shifted with a piece of absorbent cotton and replaced by a new layer of iodoform.

In a paper read before the Medical and Surgical Society of Richmond, in 1882, I set forth the results of this treatment. My cases were only small wounds, old ulcers, etc. In presence of so many more important recent publications on this subject, it would be extremely pretentious to enlarge here on such small matters. But without making mountains of mole hills, I may state the fact that I never before saw fresh wounds so invariably heal by first intention and long standing suppurating ulcers so quickly change to healthy granulations as I have seen during the last five years under the iodoform treatment.

Iodoform* has a history of its own. In 1879 it rose on

*To some readers of the *Virginia Medical Monthly* a short summary of the chemical, physiological and therapeutical qualities of iodoform may perhaps not be displeasing.

Discovered in 1822 by Serullus, it remained unknown to the medical world till 1846, when Bouchardat, in Paris, demonstrated for the first time clinically its usefulness in scrofula, goitre, lymphatic swellings, etc.

The first, best and most complete monograph on iodoform appeared in 1862 from the Italian *Righini*. The twenty-two years which have since elapsed have necessarily added a great deal to our knowledge.

Its formula is $C. H. I_3$, and it contains 96.47 per cent. of iodine. It is soluble in 200 parts of glycerine, in 25 parts of chloroform, in 10 parts of Sp. of turpentine, in 6 parts of ether, in 75 parts of alcohol, of petroleum, of ethereal and fatty oils. It is nearly insoluble in water, though 5,000 parts of water may hold in solution one part of iodoform. Equal parts of chlo-

the antiseptic sky and shone as a dazzling star from 1880 to 1882; it suddenly became eclipsed, seemingly extinguished, and then blazed up again, recovering its former brilliancy.

It found its prophet in *Moleschot*, who was the first to call our attention to the local action of iodoform. In 1878 he wrote: "I prophesy for this remedy a great future."

ral and champhor, triturated in gentle heat, dissolve $2\frac{1}{2}$ per cent. of iodoform. This solution is a useful local anodyne. The turpentine solution (10 per cent) has the most deleterious effect on bacterial life. The watery solution has in this respect no appreciable effect; tadpoles live and develop in it normally.

Iodoform administered internally or applied externally is rapidly absorbed, and the presence of *iodine* is soon traceable in all the liquids of the body. Iodoform as such is found only in the air exhaled from the lungs; in all the liquids of the body, in the blood, the saliva, the milk, the lachrymal liquid, the vitreous bodies, the bile, the fœces and the urine, it is not iodoform which we detect, but invariably *iodine* and its combinations.

The urine acquires a more yellow coloration, acid reaction and an odor of cabbage. Such urine kept in a vial, in ordinary Summer temperature, shows, after standing some days, no sign of putrefaction, no cloudiness, no decomposition of urea, no trace of carbonate of ammonia.

Rumo asserts that whenever albumen appears in the urine the elimination of iodine through the kidneys is impeded, and in consequence of retention of iodine in the blood, toxic effects may be expected.

After local application of iodoform iodine appears, according to many observers, somewhat later in the urine, and its elimination extends over a longer period than when administered internally.

According to *Rumo* the fatal internal dose of iodoform, killing within two to three days, is for Guinea pigs, 25 to 30 grains; for rabbits, 40 to 45 grains; for dogs weighing about fourteen pounds, 60 grains.

A safe dose for the adult is two grains three or four times a day, increasing gradually; twenty to thirty grains pro die have often produced toxic effects (cerebral disturbances, giddiness, delirium, trembling of the limbs, pain at micturition, albumen and blood in the urine.) On the other hand, one hundred grains pro die have been given for a short period without producing toxic symptoms.

Unlike the other preparations of iodine, iodoform applied externally does not irritate the mucous membranes, and its long continued internal use does not cause loss of weight or fat; on the contrary, many observers maintain that under its influence the general appearance becomes brighter, the forms fuller and more rounded.

Does iodoform promote fatty metamorphosis of the cells?

A number of post-mortem examinations after iodoform intoxication, amongst them four recent cases from Bollinger's Clinic in Munich, show no other anatomical alterations than fatty degeneration of the liver, the kidneys and the muscles of the heart. Of all the organs, the brain presented the highest percentage of iodine.

Two years later—1880—this prophesy was fulfilled through Mosetig in Vienna.

Mosetig was the first who introduced iodoform into antiseptic surgery as a dressing for wounds made by the surgeon's knife or otherwise.

After fifteen successful test cases, Mosetig substituted iodoform generally for the classical Listerian dressing. It was next introduced into Billroth's Clinic, and thence made its way triumphantly over the greatest part of the European Continent. Under its influence no case of pyæmia has occurred.

From his own experience (about 7,000 cases in three years), and from the experience in Billroth's Clinic, Mosetig has laid down certain rules for the application of iodoform, of which the following is an extract.

Iodoform is used in the form of a floury powder. In the form of fine crystals, as it comes from the factories, it is apt to produce a certain degree of mechanical irritation. It is applied to the wound through dusters, powder-boxes, inflators, etc., which throw a cloud of fine dust on the desired spot. To wounds which shall heal by first intention it is applied very thinly, making the wound appear as if covered with yellow gauze. Suppurating wounds are more thickly covered. The entire wound surface, all the walls and folds of cavities, must be covered. A thickness of half a centimeter ($\frac{3}{16}$ of an inch) is the maximum.

In flesh wounds, after the bleeding has been arrested and the ligatures (cat-gut) applied, all the parts are rinsed and washed with clean, cold water, and then dusted with iodoform, exposed bones as well as the soft parts. In amputations, extirpations of tumors, etc., the whole surface of the wound, and one or two inches beyond its circumference, are first covered over with iodoform, and subsequently the flaps* are adapted and united with cat-gut sutures. Care has to be taken to secure efficient drainage. Thereupon comes a layer of absorbent cotton (two or three inches thick), whose inner surface, facing the wound, is also dusted with iodo-

*The iodoform beneath the flaps does not hinder healing by first intention.

form. Over the cotton goes a wrapping of gutta-percha paper, to lessen the odor, and finally a roller. The bandage is laid on only moderately tight; too great a pressure forces iodoform into the lymphatic vessels, causing more active absorption, and consequently iodoform intoxication.

To prevent secondary hæmorrhage, a temporary elastic bandage is put tightly over the roller, and again removed in about two hours after the performance of the operation. The other dressing remains undisturbed. This dressing is permanent; it is not changed except for cause. In the majority of cases the first iodoformisation suffices for the whole time of the treatment.

Opening and changing the dressing becomes necessary in the following cases only:

(a). If a secondary hæmorrhage takes place.

(b). If, after an afebrile course of several days, fever appears. This indicates retention of the wound secretion. (The fever of the first three or four days following the operation has not the same significance, and does not call for inspection of the wound.)

(c). The appearance of stains on the outer covering does not call for a renewal of the dressing. The penetration of the covering by secretions of the wound has not the same importance that it has with the Listerian dressing, where all the aseptic virtue lies in the covering. The iodoform, being always present *in* the wound, continues to act in the same way, whether the wound secretion comes in contact with the outer air or not.

Should the discharge be very profuse, the dressing is opened, and if the iodoform should be found soiled with blood or other secretions, the wound and surrounding tissue are gently dabbed with cotton (never rinsed or washed), and the iodoform is immediately renewed.

Iodoform never causes pain, redness, or tumefaction. Under its influence the healing process goes on more rapidly than with any other method. There is generally no purulent, but only a slight muco-serous discharge.

Iodoform also acts internally, being in minute quantities, slowly but constantly absorbed. It is a sedative to the

wound. It has also a specific action on *local* tuberculosis and fungous processes of the joints; even the scraping of the fungoid growth could in some cases be dispensed with. It disappeared under the influence of iodoform, making room for healthy granulations. Mosetig communicates several cases where the iodoform was introduced directly into the articular cavity of the knee joint, all the cases ending with recovery.

In one case of fungous degeneration of the parietal pleura with formation of matter ("cold abscess"), after resection of the necrotic sixth rib, absorbent cotton, well impregnated with iodoform, was introduced into the pleural cavity. Owing to the discharge of pus the iodoform was renewed once every eight days. Recovery.

Iodoform has likewise been introduced, with the best results, into all the cavities of the body—even into the cavity of the mouth, into the rectum, and into the neighborhood of the bladder, where other antiseptics cannot be successfully applied.

One can imagine the enthusiasm which these splendid results of the iodoform treatment aroused. Of all the antiseptic methods, it is the cheapest, the most durable, the easiest to apply. In the city or in the country the requisite material is at hand. Iodoform takes a heavy burden from the surgeon's shoulders. Leaving his patient under the influence of iodoform, the surgeon can be easy in his mind. The iodoform, once applied, always remains in place to do its work.

Moreover, fancy a railroad smash, or a battle field, and compare the simplicity of iodoformisation with the complexity of the carbolic acid dressing.

Now, indeed, the time had come when, without exceptions, every wound, large or small, could, with the greatest ease, be aseptically treated.

The iodoform enthusiasm did not reach this country. Before it had time to cross the ocean and pass through the different channels to the profession, the alarm bell was sounded. One death from iodoform had already been reported from

Russia, in the Spring of 1882; then in quick succession two deaths occurred in Billroth's clinic, two more in the clinic at Breslau; thirty-seven cases of iodoform intoxication, most of them very grave, in various places. The surgeons stood aghast; the iodoform boxes dropped from their hands. Billroth abandoned the iodoform; all the others abandoned it; only Mosetig held bravely to it.

The panic subsided after a while. The English surgeons in the Egyptian war did not shrink from the free use of iodoform. The wounded and amputated were dressed with it on the battle field, and the dressing left undisturbed for five days or more.

A number of investigators set to work to inquire into the causes of the iodoform casualties, and why iodoform, which had proved harmless and beneficial in thousands of cases, should suddenly produce deadly effects.

Mosetig first came to the front. He made careful inquiries, and found that in many instances things were done which he never did. Pressure was used and the iodoform frequently renewed, contrary to his practice. Greater quantities were applied than he had ever used. True, in the clinic of Prague, in a case of resection of the talus and the greatest portion of the calcaneus the enormous quantity of seven ounces of iodoform was used to fill up the bony cavities, followed by no toxic symptoms. But in this case there was total absence of pressure. In other instances carbolic acid dressing and carbolic spray was used conjointly with iodoform. This is not only useless (iodoform being a more efficient antiseptic than carbolic acid), but also dangerous. Carbolic acid, if absorbed, causes irritation of the kidneys, whereby the elimination of iodine is retarded* or prevented.

Amongst other precautions, he also recommends that iodoform should be used sparingly, or its use suspended,

*Holger, of the Copenhagen City Hospital, has recently published eighty observations of cases treated partly with iodoform alone, and partly with iodoform and carbolic acid. Elimination of iodine through the kidneys began, on an average, twenty-one hours after dressing in the first series of cases, and twenty-seven hours after dressing in the second series. Toxic symptoms only appeared in cases of the second series.

when the wound becomes covered with luxuriant granulations.* Absorption is then most active.

Valuable as these lessons may be, they are not exhaustive. Cases of iodoform intoxication have occurred without carbolic acid, without pressure, after a first application of a small quantity of iodoform, and *vice versa*. The main cause seems to lie deeper.

Clinical observation did not suffice to solve the problem. Experimental physiology had to be invoked.

The molecule of iodine, split from the iodoform in the wound, unites, in *status nascendi*, with the alkalies of the blood, and is, in this combination, carried through the circulation. It soon appears in all the secretions of the body, and is speedily eliminated in the urine, generally between four and twenty-one hours after application of iodoform. This is the normal process.

But (according to Harrack and others) conditions may arise when the molecule of iodine, liberated from the iodoform, instead of combining with the alkalies of the blood, unites with the albumen. Absorption of iodide of albumine is very slow; its elimination through the kidneys very much retarded. The fœces of animals to which iodide of albumine was administered presented traces of it during six days, and the elimination of iodine in the urine continued for nine days.

In men, after one iodoformisation, elimination of iodine in the urine has been observed to continue during several weeks, and in one instance (Falkson) during six months.

But if in consequence of accumulation of iodine in the blood, and ensuing morbid alteration of the kidneys, elimination is unduly retarded or repressed, toxic phenomena speedily appear, and death may be the final result of a molecular blunder.

Iodoform, whose application in the treatment of wounds seemed, three years ago, to be entirely abandoned, is again, through the acquirement of a better knowledge of its nature,

* Yellow specks of iodoform are often seen, imprisoned as it were, at the base of or between the granulations. This does not hinder the healing process.

very extensively used. Not so generally as was at first expected. It seems as if just at the present time no special antiseptic can boast of being in general use. As Frederick the Great said: "In my dominions everybody may seek salvation after his own fashion," so every prominent surgeon seeks and finds the salvation of the wounded in the antiseptic he prefers. There is even on the other side of the ocean a renowned clinical professor of surgery who has reverted to the original laborious ritual of Lister, regarding it, as college men do Latin and Greek, as the best means of discipline, as the most wholesome and most invigorating antiseptic exercise for his medical students.

Be that as it may, iodoform—I sing its praises to the end—is the cheapest, the easiest to apply, the most durable, the most beneficial and efficacious of all the antiseptics. But it is not entirely free from danger.

Admitting the correctness of the theory—that iodoform intoxication stands in close connection with the form in which the molecule of iodine enters the circulation, the question arises, What are the conditions under which the molecule of iodine combines rather with the albumen than with the alkalies of the blood?

Till a satisfactory answer to this question can be given, antivivisection societies will have to mourn the untimely fate of a host of dogs, cats, rabbits, guinea-pigs and frogs.

December, 1884.

Clinical Reports.

Case of Complete Retention of Urine, with Extravasation of Urine—Abscess of the Perinæum and Gangrene—A New Trocar and Canula. By W. THORNTON PARKER, M. D.,
Act, Asst. Surgeon U. S. Army, Fort Union, New Mexico.

B. R., a half-breed Chippewa Indian, French, about thirty-three years of age, single, had suffered with stricture of the urethra for years, and had contracted gonorrhœa several times. Never received suitable treatment. After exposure to cold and rain, while slaughtering a steer, he rode several miles in a wagon, sitting on a board, over very rough

roads. Soon after his arrival at his home, he noticed that an abscess in the perinæum was worse, and also that he could not pass his urine. Thirty hours afterwards he sent for the Agency Physician. I found the patient in a very nervous and anxious state, suffering from complete retention of urine, with extravasation of urine, and a severe perineal abscess. After the most careful attempts to enter the bladder with the finest catheters and bougies, the diagnosis of complete retention from impassable stricture was determined. The absence of reliable assistants and the diseased condition of the perinæum, and also the considerable extravasation of urine, decided me against attempting external perineal urethrotomy. The puncture of the bladder per rectum was also decided against, and suprapubic puncture being the only means for relief left, was accordingly performed. No aspirator being at hand, a common exploring trocar was used, and the urine carefully withdrawn. The canula was plugged with a wooden plug, which was of course a very unsatisfactory and even dangerous arrangement.

The patient died from gangrene about sixty hours after the operation. No *post mortem* permitted.

After the above mentioned experience I sought for some suitable trocar and canula, and none of those furnished by the government proving desirable, I requested Messrs. Geo. Tiemann & Co., of New York, to manufacture one for me, which I think is very useful, and superior to any other I have yet been able to find. It can be made in any size, and the curve could be greater, or, if desired, it can be made perfectly straight. The trocar, of course, differs in no re-



spect from those in general use, and the canula is very similar; but after the trocar has been removed, the puncture having been completed, a third piece is introduced into the canula, projecting a little beyond its inner opening to protect the soft parts from being wounded by sharp edges. The

openings in the inner canula correspond with the lateral openings in the true canula. The fluid to be evacuated escapes through the inner canula, and is conveyed to a receptacle by a rubber tube. This tube is easily compressed by a spring or common clothes-pin, and the flow of the liquid regulated. The person of the patient and the bed-clothing are protected from the escaping fluid, and the operation is altogether more satisfactory by using this apparatus. The mouth of the true canula is kept in place by adhesive plaster. It will be readily seen that the dangers of wounding are reduced to a minimum by this method. The instrument will be found useful for all operations where a trocar is needed, and it is to be hoped will prove satisfactory to the profession.

Proceedings of Societies.

CLINICAL SOCIETY OF MARYLAND.

[Specially reported for the *Virginia Medical Monthly*.]

The Society met at 8:30 P. M., the President, Dr. J. Edwin Michael, in the chair. Dr. William H. Noble, of Port Deposit, Maryland, was nominated for membership. Dr. E. Van Hood, of St. Joseph's Hospital, Baltimore, was favorably reported by the Examining Committee, whereupon he was unanimously elected to membership.

Reduction of Shoulder-Joint Dislocation by Manipulation.—Dr. Tiffany called the attention of the Society to a method of reducing dislocations of this joint which is extremely successful, and of which quite a large number of cases are now already upon record. It was first introduced to notice by Kocher, of Berne, but attracted no attention. It was again brought forward at the London International Congress, and since that time has enlisted much interest. It consists essentially of an effort to apply Bigelow's method for the hip-joint to the shoulder-joint. The patient is placed upright in a chair and the elbow held firmly to the side. The arm is now everted as strongly as possible, carried outward, then upward, the elbow touching the chest; then the hand is carried to the opposite shoulder. During the last-named movement reduction will be effectual. A number of cases have already been reported in which success was attained on the first attempt. The subcoracoid variety of dislocation is the most common form, and here the proposed manipulation unlocks the head of the bone from the obstructing edge of

the glenoid cavity. The method is exceedingly simple, is effected with great ease, and is practically painless. The advantages claimed for it are that no traction is required, and no assistance, the hands of the operator being alone sufficient. The patient must be seated on a chair sufficiently stiff not to break down.

Dr. Tiffany reported, briefly four cases :

Case I.—Adult, male ; a subcoracoid dislocation of the right shoulder. Patient was seen two hours after the occurrence of the accident. He was placed in a chair and manipulation practiced slowly. As soon as the arm was brought upward and forward the bone slipped into place.

Case II.—Subcoracoid dislocation. Female. She was seen four weeks after the accident. The patient was placed in the recumbent posture and ether was given. The same manipulation was followed by the same result.

Case III.—An adult male ; subcoracoid dislocation of the right shoulder ; seen ten weeks after the accident. There was difficulty in everting the arm ; this was done, however—the adhesions yielding with a crackling sound. Reduction was effected after the third attempt.

Case IV.—An adult male, æt. 58, with a subcoracoid dislocation of sixteen weeks' standing. The manipulation here failed ; after two or three attempts it was effected by another method.

Specimens of Ovaries, Fallopian Tubes and Subperitoneal Fibroid Removed by Laparotomy.—Dr. B. B. Browne reported the following case: A colored woman, æt. 23, single ; had a large myo-fibroma of the uterus and subperitoneal fibroid. She had suffered a great deal, having been a constant invalid for three years ; unable to do any work at all. As the probabilities were, in view of her age, that her troubles would have continued up to the menopause, and that the tumor would have undergone progressive increase in size, it was determined to remove the ovaries and tubes. The subperitoneal fibroid was found attached to the right side of the fundus uteri. The uterus was very much enlarged and anteverted, and the myo-fibroma occupied the entire upper part of the organ. Although the cavity of the uterus only measured two inches before the operation, the uterus, with the tumor, measured six to seven inches. The increased size of the uterus caused difficulty in reaching the ovaries, which were lower than normally ; this was, however, effected, and they were ligated, the left first. In searching for the right one the small subperitoneal fibroid was lacerated and com-

menced to bleed; a ligature was therefore placed around it (as near the uterus as possible), and it was removed. There was no hæmorrhage from the stump. The peritoneal cavity was washed out with slightly carbolized warm water. There was some difficulty in retaining the intestines, which was obviated by the use of large flat sponges. The patient was considerably exhausted by the operation, but reacted well and continues to do well (to-day is the eighth day since the operation). The temperature has never been over $100.1-5^{\circ}$ F. The sutures will be removed to-morrow.

Dr. Chunn said this was the second or third case of the sort which had been operated on in this city. Of 200 colored women with fibroids seen at the University Hospital, in none was the operation demanded. At the International Medical Congress, Hegar gave the mortality of the operation as 14 per cent. What was the need for the operation here?

Dr. Erich said the operation was an exceedingly doubtful remedial measure. He thought he would only be justified in operating in extreme cases with excessive hæmorrhage or extreme suffering. In the case reported before the Society last winter by Dr. Chunn, removal of the ovaries did not prevent uterine hæmorrhage.

Dr. Chunn said he had not operated with a view to stopping a flow of blood, because the patient had had amenorrhœa for two years previously. He saw her five months after operation; she then had uterine flow, apparently not periodical. This patient had pain every twenty-eight days—what due to, Dr. Chunn could not tell. He knew of no other means of checking this pain but removing the ovaries. She is now able to go out and work, and has recovered her cheerfulness.

Dr. Chambers knew this patient. She is thoroughly unreliable intellectually, physically and morally. She attended the clinic at the College of Physicians and Surgeons for two years. She had nervous attacks whenever she wished to. He thought no conclusions could be drawn from experience in her case because she was so different from any other person he had ever seen.

Dr. Browne said the whole of the upper part of the uterus in his case was a mass of fibroids. The patient had been an invalid three years. She had dysmenorrhœa and menorrhagia and was unable to walk. These tumors go on to increase up to the menopause, frequently blocking up the pelvic cavity and extending above the umbilicus. It is extremely dangerous to interfere with large uterine fibroids. It is en-

tirely justifiable in a young colored woman to operate before the tumor has blocked up the pelvis. The operation not only consisted in removing the tubes, but also in tying all the blood-vessels in the broad ligaments, and thus cutting off the blood supply to the uterus. He thought there was good reason to expect the menses would cease, although until the uterus undergoes diminution in size we may expect some continuation of the blood-flow.*

Specimen of Gunshot Wound of the Vertebra.—Dr. R. Winslow exhibited a specimen of spine showing the results of a gunshot injury. One young colored woman was shot by another in a fit of jealousy with a Colt's revolver. The former was sitting down, the latter standing in a doorway. The bullet entered the neck opposite the fifth cervical vertebra. She fell forward completely paralyzed. The left arm was cold and helpless, and the left pupil was said to be dilated. When the patient entered the University Hospital she had paralysis of the left arm and lower extremities, but none of the right arm or pupil. Sensation was abolished on the right side at first as high as the first rib; afterwards it was restored to the epigastrium. On the left side the loss of sensation did not extend so high up. There was no effort to extract the ball. The patient suffered with large bed-sores and spat blood. At first there was absolute retention of urine, which subsequently was exchanged for incontinence. The respiration was almost entirely diaphragmatic, there being some play of the serratus magnus muscle. The patient died three weeks after the injury.

Post-Mortem.—The bullet entered the left side of her neck at the posterior border of the sterno-cleido mastoid, and passing downwards, passed behind the brachial plexus, merely cutting one small twig from the cervical plexus. The transverse process of the seventh cervical vertebra was chipped slightly, the neck of the first rib shattered, and the bullet finally lodged behind the neck of the second rib, impinging slightly upon the spinal canal. The spinal cord was atrophied opposite the point at which the ball lodged, but was not cut by the missile. Spinal meningitis was also present.

Dr. Miles pointed out that the spinal cord was reduced to a soft pulp at the point where the bullet struck, although the bullet did not touch it, but only penetrated the spinal canal

* Under date of October 27th, Dr. Browne says: "I have seen the patient to-day. She has had no menstruation or flow of blood since the operation. She has improved in health and strength and has resumed work."—*Reporter*.

to a slight extent; the softening being therefore the result of shock. The reflexes of both skin and tendons were completely lost. Tickling the sole of the foot produced no effect. The muscles responded freely to the Faradic current up to the time of death.

Dr. Winslow said the location of the lesion was diagnosed before death.

Dr. Winslow also stated several other cases of gunshot wounds which had occurred in his service at the University Hospital lately.

I. He was called to see a man who had a bullet wound in the anterior axillary line. The bullet penetrated the sixth intercostal space and presumably the liver. He was in a condition of severe shock. There was free bleeding but no discharge of bile from the wound. No pain was complained of in the region of the liver, but there was pain in the right shoulder. He died without reacting in twenty four hours. On post mortem examination the bullet was found in the substance of the diaphragm, where it had lodged—having carried a portion of the clothing before it.

II. In this case there was a bullet hole in the median line over the pubis, and another in the left buttock. Bullets were extracted from near each of these situations. The next morning the patient was in articulo mortis. Bloody urine was drawn from the bladder, and blood was found in the fæces. On post-mortem examination the abdominal cavity was found filled with cherry and pepper seeds, etc. Bullet holes were found in the bladder and in the intestines. The explanation of these appearances was that the two bullets had gone in parallel directions.

III. In this case there is a fracture of the radius and also an abdominal wound.*

Dr. Waters: At the time of President Garfield's sickness it was stated that there was no record of recovery where the body of a vertebra had been wounded by gunshot injury. But in the first volume of the "Medical and Surgical History of the War" a case will be found reported by the present speaker, where there was a gunshot wound of the body of the third cervical vertebra. All the parts below were paralyzed. According to the report of a pension examiner received nine years after the injury, the body of the vertebra and the lateral process had come away. In another case the transverse process of the second cervical vertebra had been carried away and the third vertebra had been fractured.

* The patient is still alive, but will probably die.

There was no paralysis in this case, the lesions of which were not suspected until post-mortem.

Dr. Waters referred to several other cases which had been reported of similar injuries.

Malignant Papilloma of Cervix Uteri and Cancerous Breast. Dr. Erich exhibited specimens of the above. The cervix had been amputated with scissors. In the breast case the axillary glands were not involved. An elliptical incision was made and the entire gland enucleated without further use of the knife.*

Dr. Winslow thought it doubtful, in the absence of a microscopic examination, whether this was a case of carcinoma, especially as no axillary glands were enlarged and no adhesions of the skin existed. After such a length of time these changes were to be expected if it were cancerous. Thought it might be sarcoma. However, whether cancer or not, he agreed with Dr. Erich in the propriety of its removal.

Three Consecutive Cases of Superficial Sarcoma, with Specimens.—Dr. Coskery read a report of three cases :

I. A German Baker, æt. 47, discovered in March, 1883, a small movable tumor under the skin, inside of and above the left nipple. Three months afterwards it was the size of a foetal head and nodulated. Some days later it was extirpated at the city hospital. In December, 1883, he returned with a similar tumor, which was again extirpated together with a portion of the pectoral muscle. It consisted of roundish, greyish, friable masses. A large surface was still granulating when he left the hospital, January 18th, 1884. Soon afterwards, the growth began to re-appear at several points, and on April 28th a space of one and one-half inches which had never healed from the second operation, was found to be the site of a new growth. In front of and above the outer end of the left clavicle was a rounded mass, and within this a similar mass—both somewhat movable. Without the second incision, was a larger mass reaching towards the axilla. Within the incision was a lump which seemed to be firmly attached to the chest. Owing to the rapidity of growth, the anæmic condition, and the doubtful extent of the disease, operation was strongly discountenanced. The patient insisting, however, attempt at removal was made April 30th. An incision was accordingly made over the inner and upper tumor and one of the masses fished out with the fingers; it was found to dip down behind the clavicle. Another incision was made over the outer mass and the lump hooked out

* The specimen has been examined and found to be a fibro-sarcoma.

with the fingers. Profuse hæmorrhage followed from numerous bleeding points. To stop the bleeding a sponge was thrust deeply above the clavicle, and the cicatrix of masses to the inner side quickly scooped away. Owing to the profuse hæmorrhage, and the size and depth of the growth, the axillary portion of the tumor was left untouched. At the last report the patient was up and about, but the growth was making its appearance in the scar and its vicinity. Microscopical examination showed the tumor to be a spindle-cell sarcoma.

II. A woman, æt. 44, with six children, noticed twenty years ago a small lump an inch above the right nipple. About one year ago it began to increase in size, and from March, 1884, the growth was rapid. April 28th, 1884, there was found a nodular, movable tumor the size of a cocoanut, not tender on handling. Superficial veins near the breast were tortuous and dilated. Removal was effected by an elliptical incision, about an ounce of greenish-yellow, glairy fluid escaping during removal. Healing took place by first intention, and the patient returned home May 15th, the wound nearly cicatrized. June 1st she reported herself entirely well. Microscopic examination by Dr. Keirle revealed a spindle-cell sarcoma.

III. A woman, aged 50, for two years non-menstruating. About two and one-half years ago a tumor appeared on the outside of the left thigh, one inch above the patella. Growth was slow until April, 1884, when a blow was received which was followed by pain and swelling. May, 1884, it was the size of a large orange, nodulated and slightly adherent. May 14th, under chloroform, an incision was made and the mass scooped out with the fingers, the knife being used in some places. During removal a small cyst burst, discharging a watery fluid. June 14th the wound was entirely healed. Examination by Dr. Keirle showed the growth to be of the same nature as in the two other cases.

CHICAGO MEDICAL SOCIETY.

At a stated meeting of this Society, held November 10, 1884—

Dr. Edmund Andrews presented the following report of recent cases in his practice: *Two cases of Gastrostomy, two cases of Excision of the Rectum, Remarks on Litholopaxy, and A New Instrument for Varicocele.*

Dr. S. V. Clevenger submitted a lengthy treatise under the head of *Political Abuse of the Insane*.

Dr. J. H. Chew read an elaborate and appropriate address, consisting principally of the *Fourth Annual Report of the Shantung Dispensary and Hospital* at Pang-chia-chuang, that was prepared by Dr. Henry D. Porter, who was for a number of years a resident missionary in China. This novel paper was keenly appreciated. It gave the experiences and views of the essayist as to diseases of the Orient, etc.

Drs. B. and J. Beltman read interesting papers on the new local anæsthetic, *Hydrochlorate of Cocaine*, and recited cases illustrating its use in ophthalmic and nasal surgery in the following cases: Operation for Dilating Stricture of the Nasal Duct, Removal of Foreign Body from the Eye, Operation for Cataract, Cauterization of Inferior Turbinate Bones, etc., its application for the relief of pain in a case of Otitis Media Acuta Purulenta. In each of the cases its efficacy proved all that has been claimed for it as a local anæsthetic.

The following special report from the Committee on *National Sanitation* may be read with much interest, as it pertains in reality to the National Board of Health, presented by Dr. John Bartlett:

Mr. President,—The committee appointed at the meeting of this Society, September 15, 1884, to consider and report upon a series of resolutions presented by Dr. Liston H. Montgomery, having reference to national sanitary matters, respectfully report the following preamble and resolutions as suitable to be adopted:

Whereas, experience has firmly established the fact that the ravages of certain infectious and contagious diseases may be in good measure prevented, restricted or arrested, by the enforcement of suitable sanitary regulations; and

Whereas, the United States is constantly exposed to the importation of disease from foreign countries, and, because of the facility and rapidity of inter-State transit, to the rapid spread of infection once finding lodgment on our borders; and

Whereas, this exposure, because of the prevalence of cholera in Europe, is just now unusually great; and

Whereas, the facts are that matters of sanitation are in some of the States of this Union entirely neglected, while in others they are simply taken cognizance of by the appointments of boards of health, in their functions advisory only, and unclothed with powers of authoritative action; and

Whereas, either of these State boards of health, as now

constituted, may prove derelict or inefficient in its duties, or act without concert with or even in antagonism to the boards of other States; and

Whereas, the exigencies occasioned by the appearance of violent epidemics demand organized means for the prompt recognition of the outbreak of disease, and vested authority, limited in its area by the boundaries of the country only, to take such immediate steps in matters of protection—as vaccination, isolation, quarantine, etc.—as experience has taught to be useful; and

Whereas, no national authority in sanitary matters now exists: therefore,

Resolved, That it is the judgment of the Chicago Medical Society that the sanitary interests of the United States demand the establishment of a permanent national health authority, which shall have for its main functions the detection of pestilential and epidemic diseases, and the enforcement, where necessary, of sanitary regulations tending to prevent, to abate, or to suppress them.

Resolved, That as a step toward the consummation of the idea suggested in the foregoing resolution, a committee of three be appointed by this Society to collate facts tending to show the usefulness and necessity of a national sanitary organization, and to compile the same in such form as may be available for disseminating information upon and creating an interest in national sanitary legislation.

Resolved, That the said committee be empowered and instructed to urge the importance of national legislation upon the attention of the congressional delegation from Illinois, and fittingly to present the subject to the representatives of the people in both houses of Congress.

All of which is respectfully submitted. Signed by Drs. O. C. DeWolf, chairman; R. E. Starkweather, L. H. Montgomery, John Bartlett, J. H. Etheridge, A. R. Jackson, J. H. Hollister, committee.

The suggestions embodied in the resolutions were unanimously adopted, after which the Society adjourned, L. H. M.

Dextro-Quinine is regarded with much favor by Arkansas doctors, it being cheaper than quinine and more efficient than cinchonida. The testimony of leading practitioners throughout all the States are given in its behalf.

Book Notices, &c.

Medical Rhymes. Selected and Compiled from a Variety of Sources. By HUGO ERICHSEN, M. D., Professor of Neurology in the Quincy School of Medicine, Medical Department of Chaddock College, Canada, etc. With an Introduction by WILLIS P. KING, M. D., Sedalia, Mo., Ex-President of Missouri State Medical Society, etc. Illustrated. St. Louis, Chicago, Atlanta: J. H. Chambers and Co., 1884, 8vo. Pp. 220. (From Publishers.)

We think both the binding and paper of this volume are better than those of the last book of the same size issued by this publishing house (Alt's Ophthalmology), but it seems to us that there is still room for improvement. We call attention to such facts for the benefit of the authors, as there can be no doubt but that a good outward appearance in a book helps the subject-matter to a considerable degree—whatever the merit of the latter. There is a great deal to be said in favor of this book. It is one of those volumes which meet the "long felt want" of a book that can be read and re-read at odd times between the pressing cares of a doctor, and which can at each reading produce a smile without mental effort on the part of the reader. There never can be too great a supply of such "medical" books. Our professional literature is sadly deficient in the line of humor, and it is natural for any member of one of the professions to especially relish any work of wit or humor which appeals to him in the way of his particular vocation. We think Dr. Erichsen deserves the thanks of his fellow practitioners for the effort he has made to collect from all sources at his command everything in the shape of medical verse worth printing for their enjoyment. He presents in this book a collection of verse which he says he hopes will "amuse and edify all sorts of followers of Æsculapius," and there can be no doubt of his success. The range of versification is from the poetry of Dr. Holmes to the doggerel of *London Punch*, and until we read the book we had no idea how many excellent followers of the Muses our profession contained. It seems to us that the first piece written by Saville Clarke, of London, has real poetry in it, and this we might say of more than one metrical composition in the book. Of the humorous verses we think Dr. Holmes' "Rip Van Winkle, M. D." easily carries off the palm, and the "Ballade of Ye Blue Glass" is well worth laughing over. One of best things between the covers is the five page introduction by Dr. Willis King. What he has to say concerning the relations existing between the doctor and the outside world is so true and exactly to the point that we wish we had room to quote from it. C.

Diagnosis and Treatment of Diseases of the Heart. By CON-
STANTIN PAUL, Physician to the Lariboisière Hospital, France, etc. Trans-
lated from the French. New York: Wm. Wood & Co., 1884. 8vo. Pp. 335.
(For sale by West, Johnston & Co. Richmond, Va.)

The March number of Wood's Library of Standard Medical Authors, devoted to a full consideration of the diseases affecting the most important viscus of the body, is a book requiring a close examination to do it full justice. Medical literature is by no means so complete in reference to heart affections that we can afford to pass lightly upon a work of this character. M. Paul has evidently tried to present to the average doctor, not a specialist, a book which can be kept constantly at hand, and has in a great measure succeeded. One of the weakest points in the book, it seems to us, is the frequent use of the personal pronoun. The author, notwithstanding his well known standing and ability, is rather given to placing himself in too prominent a position as an authority. This perhaps is a minor fault, and may be overlooked in consideration of the excellent material he is able to present.

The work is divided into three sections—the first treating of general cardiac topography—the second of diseases of the heart and its membranes—and the third is devoted to a consideration of the proper treatment of the affections alluded to in the previous section. The style is pleasant, and, but for the objection mentioned would be very readable indeed.

The volume is well illustrated with wood-cuts, and those showing the sphygmographic tracings in different diseased conditions of the heart are especially worth attention. The publishers have of course done all in their power to make the work attractive.

A Practical Treatise on Fractures and Dislocations. By FRANK HASTINGS HAMILTON, A. B., A. M., M. D., LL. D., Late Professor of Surgery in Bellevue Hospital Medical College, and Surgeon to Bellevue Hospital, New York, etc., Seventh American Edition, Revised and Improved. Illustrated with Three Hundred and Seventy-Nine Wood-Cuts. Philadelphia: Henry C. Lea's Son & Co. 1884. Pp. 1005. (For sale by Thos. J. Starke & Sons, Richmond, Va.)

Notwithstanding the many editions and revisions this deservedly popular work has received since its first publication a quarter of a century ago, this—the seventh—has almost the merit of a new book. The talented author has evidently exercised especial care in this edition to take advantage of what new developments have occurred since the last revision, to bring the subject-matter of the volume in question down to the latest practicable date, and the result of his labors is

plainly an improvement on the previous issues. We can hardly name a book of more practical value to the surgeon and general practitioner. Dr. Hamilton is not only an able lecturer, (as we well remember from personal experience,) but is even a better writer. His style is easy and flowing, at the same time being impressive. In fact this book is not only one which is of the greatest value as an authority, to be kept in the physician's library, but one which well repays the general medical reader. The vast practical experience of the author has been drafted upon to guide him in disputed questions, and he has not hesitated to repudiate certain beliefs which find credence in the profession when his close observation has taught him the reverse. In plain terms, Dr. Hamilton does not agree with some of the latest theories in reference to fractures, but he only refuses to accept such testimony as is opposed to the experience of forty years of active practice. He does this however in no unpleasant way, and, like all men who stand securely on the "top round of the ladder," is open to conviction if proper proof is presented.

Editorial.

Vanderbilt's Gift to the Cause of Medical Education.—We give below the full text of the letter containing his munificent donation to the College of Physicians and Surgeons of New York. While the amount may seem small in comparison with the estimated wealth of the giver, yet, it is so far beyond anything yet done by a private citizen toward placing the American system of medical education on a level with the endowments of some of the foreign schools, that we think it deserves the fullest recognition possible by the profession. Possessing this sum, the institution named will be easily able to take a long stride toward that much hoped for goal—a perfect system of graded and prolonged course of medical study before graduation. This gift to medical science rivals that of Mr. Andrew Carnegie to Bellevue College, made for the purpose of establishing a pathological laboratory, with its accompanying course of study. It remains to be seen in what wise manner the College will employ its half million. That it will be most wisely used the names of the trustees and faculty are sufficient evidence. Among the former are those of some of the best business men in the metropolis, and those of the latter are known and respected by every medical man in the country. Mr. Vanderbilt's letter is as follows:

"New York, Oct 17th, 1884.

DR. JOHN C. DALTON, President of the College of Physicians and Surgeons.

MY DEAR SIR: I have been for some time examining the question of the facilities for medical education which New York possesses. The doctors have claimed that with proper encouragement this city might become one of the most important centres of medical instruction in the world.

The health, comfort and lives of the whole community are so dependent upon skilled physicians that no profession requires more care in the preparation of its practitioners. Medicine needs a permanent home where the largest opportunities can be afforded for both theory and practice. In making up my mind to give substantial aid to the effort to create in New York City one of the first medical schools in the world, I have been somewhat embarrassed as to the manner in which the object could be most quickly and effectively reached. It seems wiser and more practical to enlarge an existing institution, which already has great facilities, experience and reputation, than to form a new one. I have therefore selected the College of Physicians and Surgeons because it is the oldest medical school in the State, and of equal rank with any in the United States.

I have decided to give to the College \$500,000, of which I have expended \$200,000 in the purchase of twenty-nine lots, situated at Tenth-Ave. and Fifty-ninth and Sixtieth streets, the deed of which please find herewith; and in selecting this location I have consulted with your treasurer, Dr. McLane. The other \$300,000 please find inclosed my check for. The latter sum is to form a building fund for the erection thereon from time to time of suitable buildings for the college.

Very truly yours,

W. H. VANDERBILT."

In response to this unprecedented letter and contents, Dr. Dalton replied acknowledging the gift in fitting terms, in the course of his reply referring to the endowment in the following manner.

"In common with the officers and alumni of the College, I rejoice at this great accession to its means of prosperity and usefulness. But I have, also, another reason for gratification. In the Old World such provisions for scientific and educational institutions is made by governmental appropriation. It is a just cause for pride and satisfaction to see in our country the same ends accomplished by the enlightened liberality of private munificence.

On the 30th of November the Faculty of the College, at a regular meeting, adopted a series of resolutions thanking

the donor, and it is to be hoped that the following—the third resolution—will prove something more than a mere stereotyped set of words.”

“*Resolved*, That the great usefulness of this benefaction to the College lies in the power, now given, to provide for that improved teaching by demonstration, rather than by precept merely, which is of the essence of modern scientific education; and also to provide for the advancement of medical knowledge by research, in a way impossible here before.”

The Trustees of the College expressed their sense of gratitude in a number of resolutions of which this is a fair sample.

“*Resolved*, That the Trustees hereby express to Mr. Vanderbilt their cordial appreciation and their grateful acknowledgement of this magnificent, and, it is believed, unexampled benefaction, on the part of a private individual, to the cause of sound medical learning.”

The Alumni Association, determined to show their full appreciation of the motive governing Mr. Vanderbilt's action, in the formation of their letter of thanks, adopted the following preamble and resolutions;—

“*Whereas*, Our appreciation of his liberality can be best shown by such action on our part as will add materially to the object of his benefaction; it is therefore

Resolved, That the cordial thanks of this Association be sent to Mr. William H. Vanderbilt; and furthermore

Resolved, That action be taken immediately to raise subscriptions for placing the Physiological and Pathological Laboratory Fund of this Association upon a basis suited to the requirements of the departments of Physiology and Pathology.”

The students at present attending the College presented their thanks also in a very pleasant and appropriate manner, among other resolutions offering this one in reference to the liberal giver;—

“*Resolved*, That thereby he has earned the gratitude of the students of this College, as they will henceforth enjoy increased facilities for instruction, study and practical investigation, whereby the standard of medical attainment throughout the whole country will be raised.”

Altogether the action of the recipients of this superb donation have realized the spirit in which the gift was tendered, and have shown a thorough appreciation of the feeling which prompted the donor. It is to be hoped that Mr. Wm. H. Vanderbilt will not be the last one of our millionaires whose attention to the present condition of medical study in the United States has been directed.

"Mineral-Earth" is a surgical dressing designed to be used by physicians. It may be applied with advantage in the following conditions: To wounds and ulcers, to ulcerating forms of malignant diseases, to catarrhal inflammations, to various cutaneous troubles, to erysipelas, gangrene and dropsical swellings, to various tumors and other morbid growths, to burns, and to bites from poisonous insects and reptiles. In order to insure the genuineness of this preparation, it is put up in sealed glass jars (4x5x2½ in.), each jar being numbered and bearing the trade mark of the Company, "Mineral-Earth," and is sold by the principal druggist throughout the United States at the uniform price of Fifty Cents.

For convenience of Physicians, this preparation is also put up in larger packages, sealed and stamped by the Company. Price One Dollar.

Horlick's Food.—"After a trial of five years of Horlick's Food for Infants, I have no hesitancy, and take pleasure in pronouncing it by far the best article of the kind ever brought to my notice, the results obtained by me in its use have been more that satisfactory. I have used it both in my family and practice."—*Howard W. Long, M. D., 810 N. 8th, St. Philadelphia.* Book on treatment of children sent free. Horlick's Food Co., Racine, Wisconsin.

Gold Medal Awards.—We take pleasure in the insertion of the following token of foreign appreciation of the excellence of two of our American preparations. The *London Lancet* says; "Among the food products exhibited at the International Health Exhibition, London, 1884, from the United States, were *Beef Peptonoids* and *Maltine*; both of these preparations carried off the only Gold Medal and highest Award against numerous competitors in their respective classes. All food preparations were critically analyzed at this Exhibition by a jury composed of the best chemists in the country."

Muriate of Cocaine.—Our attention has been called by valued friends to an accidental error which was made in a recent editorial note in regard to the price of this new and important drug. Its merits have been heralded through the columns of nearly every Medical Journal of the civilized world, and its therapeutic uses have been satisfactorily tested by practitioners everywhere. The papers on this subject

published in our last issue, and the experience communicated to this number by the eminent ophthalmologist—Dr. J. J. Chisolm, of Baltimore—fully confirm its worth.

In a recent letter to us, Messrs Parke Davis & Co., referring to our notice of Cocaine state, "Cocaine is the alkaloid of the Coca plant (*Erythroxylon Coca*) and entirely different plant from the Cocoa. As it is very easy for one to confound the Coca and Cocoa, some French scientist has recently advocated, and we have seen the name since used, to call the Coca '*Uuca*' instead, and Cocaine '*Cucaine*,' thus avoiding the liability to leading to any misconception."

In the editorial referred to we stated the price to be \$67.20 per pound, of course this was a typographical error. The price, according to reliable druggists, is from twenty-eight to thirty times as much.

Obituary Record.

Harvey Leonidas Byrd, M. D. died at his residence in Baltimore, M. D. on the morning of November 29, 1884. In his demise the profession of that city loses one of its most valuable members. It would be difficult to find a physician of his age who has occupied positions of trust and honor in connection with medical education to any greater extent than Dr. Byrd. He was born in Salem, Sumter Co., S. C., in 1820, being therefore at the time of his death about 64 years old.

He graduated from Jefferson Medical College in 1840, and a few years later took another medical degree at the University of Pa. He entered the Confederate Army as surgeon in 1861, being at first attached to Rylander's battalion of the army of Northern Virginia, afterward serving as post-surgeon at Mobile Ala., where he remained until the close of the war. About 1866 he removed to Baltimore, making that city his home until death. In the course of his active life he has been Dean and Professor in the Savannah Medical College, Dean and Professor in Oglethorpe Medical College, (Ga.) Dean and Professor in Washington University, (Baltimore,) Dean and Professor in the College of Physicians and Surgeons of Baltimore, and President and Professor in the Baltimore Medical College—which latter positions he held at his decease. He was the founder of the two last named medical schools, both of which are now in a prosperous condition. He was a frequent contributor to medical literature, both to prominent journals in the North and

to the *Virginia Medical Month'y*, the latter being a frequent recipient of his excellent articles. A clear and careful writer, his contributions were of a high order, showing him to have been a safe and deep-thinking practitioner.

Samuel Merrifield Bemiss, M. D.—This well known physician was suddenly called away from this life on Nov. 18, 1884, at his residence in New Orleans, La., in the 64th year of his age. A graduate in medicine from the University of New York in 1846, he began practice in Bloomfield, Ky., but moved to Louisville in 1853, where, in 1858, he was elected Professor of Medicine in the University. In that city he built up a general practice which was excelled by that of very few physicians in the place, but in 1862 the call of duty carried him into the Confederate army as surgeon.

He served with honor in the army of Virginia and elsewhere during the war, and at the close returned to Louisville, accepting the Chair of Physiology in the same institution where he had formerly taught Clinical Medicine. In 1866, he received an urgent call to accept the professorship of Theory and Practice in the University of Louisiana, N. O. and was still occupied in that position at the time of his death.

A peculiar circumstance in this connection is worthy of relation. A few hours before his death he delivered a lecture to his students, on the subject of apoplexy, being at that time, apparently, in excellent health. At the conclusion of his lecture—demonstrating that a man in good health was liable to an attack of this affection—he pointed to himself and said: "I am the man in danger of apoplexy. I am liable to die at any moment from it." Inside of a few hours he was dead, and from the breaking of a cranial blood-vessel.

Dr. Bemiss was one of Louisiana's best physicians. Of Northern parentage, he was essentially a Southern man, and his best work was in reference to the protection of the South from yellow fever and kindred diseases. His work in this direction was so well appreciated that Congress appointed him a member of the National Board of Health, on which he was serving when he died. He was not only for years senior editor of the *New Orleans Medical and Surgical Journal*, but had for many years enriched the columns of other medical journals with the excellent contributions which so easily took birth under his pen. We are proud to say that he was not only a subscriber to the *Virginia Medical Monthly*, but also that he was a frequent contributor to its pages.

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ART. I.—Early Operative Interference in Ovarian Tumors.

By HUGH M. TAYLOR, M. D., Visiting Surgeon St. Luke's Hospital, etc.,
Richmond, Va.

American surgeons are, at the present time, much interested in ascertaining why their results after ovariectomy are so much worse than those reported by Tait, Martin, Thornton, Wells and Keith. They hear of ninety-two, ninety-four, ninety-six and ninety-seven per cent. of recoveries in the hands of these operators, and they naturally wonder that the death rate in this country should be as high as ten, fifteen, twenty, and even thirty per cent. It cannot be that the trans-Atlantic surgeons are as a whole better operators. The day when mere manual dexterity made a physician or surgeon is gone; this is now made secondary to attainments of a higher order. It cannot be that they are better informed, for as soon as an advanced idea is conceived, it is given to the medical press of Europe or other continents, and is almost simultaneously known in this country. Their minutest details have been carried out; their seemingly most insignificant suggestions heeded; their methods studied earnestly and followed closely; and yet the death rate in the hands of

American surgeons is so comparatively high that it remains a matter of regret, if not of actual mortification. A comparison of methods has failed to explain the great difference in the results, and no less barren has been a consideration of the difference in climate, mode of life and physical condition of the people.

In an editorial in the November number of the *New York Medical Journal* may be found a suggestion, which we think throws some light upon this question, and if followed through all of its ramifications, will afford relief to the American surgeons, who are discouraged.

Mr. Tait thinks there are too many men in this country who essay to do abdominal surgery. The editorial mentioned takes issue with him upon this point, and remarks that "except for the brilliant achievements of a few in limited spheres, it is to the surgeons of the Woman's Hospital that the sufferers with ovarian tumor have looked as the ministers of their last desperate chance of relief. It is easy to understand that those who were compelled to come a great distance were prone to put off the evil as long as possible, being treated in the meantime by palliative measures, which—especially tapping—only tended to reduce their chances in the end." The truth of this conclusion must be apparent to all. It is so much easier to get a patient from Paris to London, or from Dublin to Edinburgh or Birmingham, than it is from Florida, Texas or California to New York.

But we think there is another potent influence which results in keeping for a long time cases of ovarian tumor out of the hands of the operator. Thirty years ago the published mortality from ovariectomy was fifty per cent., and inasmuch as many failures and but few successes are left unpublished, it was perhaps even greater than fifty per cent. In the older text-books may be seen the advice to operate just when the patient's general health begins to suffer. In view of the terrible mortality, surgeons were then justified in advising non-interference so long as the patient was not in immediate danger, or her general health was not becoming seriously undermined. This teaching has not lost its entire influence, and to its erroneousness must we attribute, at

least to some extent, our present bad results. It may be asked, why is not the influence of this antiquated teaching felt in all countries alike? The country practitioners, in Europe, are much nearer the great operators, and the advanced views of the great thinkers are easily presented for their consideration, and, as a consequence, they have had impressed upon them the advantage of an early operative interference, and the danger of time, physic and tapping. They have been taught that adhesions constitute the greatest of all complications; they have been educated to the belief that there is, probably, a period in the history of every ovarian tumor when it is free from adhesions, and, if this is true, then *that* time is the golden one for operative interference, and they have been further impressed with the belief that the indications all tend to prove that this much desired period exists early in the history of the tumor. As a result of this advanced teaching, the cases are received by the operators at a time when they are in a good condition to be operated upon, and before their chances of recovery have been lessened by physic, tapping and adhesions, reports of the removal of tumors of great size are becoming less frequent, and at no distant period such cases will be known to reflect discreditably upon whoever is responsible for keeping them out of the hands of the operator.

It is within conservative bounds to claim that adhesions are the greatest of all complications. If it is possible to operate before adhesions have formed, it is possible to lessen very much the danger of an ovariectomy. No one can have witnessed many bad cases without realizing the truth of this last assertion. No one can fail, after witnessing a very bad case, to be impressed with the belief that if there had been no adhesions, the operation would have been simple, and the result possibly different. Adhesions are directly the cause of all the complications of a serious nature. Without adhesions hæmorrhage is rarely excessive, and without adhesions to tear, lacerate, cut, and tie, there will probably be no traumatic or surgical fever, and the chances in favor of pyæmic or septic fever will be much lessened. Without them there is often no necessity for introducing the hands, sponges or instruments into the peritoneal cavity. When the adhesions

are strong and numerous, it is rarely possible to empty the cyst without allowing some of its contents to escape into the peritoneal cavity. When this happens, a prolonged process of sponging must be gone through; and even with the greatest possible care in this sponging the walls and contents of the peritoneal and pelvic cavities must be left smeared with a coating of this glutinous cystic fluid.*

If it is true that bacteria are everywhere present in the atmosphere; are the sole cause of septic changes; enter from wounds into the surrounding tissues; and carry their deleterious influences wherever they go; and if it is true that they are so tenacious of life that they can be carried on the instruments, sponges, hands, beard, clothes, etc., of the operator, millions under his finger nails, and countless numbers in one drop of fluid, is it possible by sponging alone to cleanse perfectly the contents of the belly, after they have been bathed for some time in this sticky fluid? This difficulty has been recognized, and it has been recommended by Emmet to deluge the peritoneal and pelvic cavities with antiseptic water, with the object of washing it clean. If we have many adhesions to contend with, we will, as a rule, have an effusion of serum as a product of reparative inflammation; and if it is true that bacteria, or causes of septic infection—whatever they may be—are so active, and capable of doing so much harm, this bloody serum (and we have never seen any serum from the peritoneal cavity, after an ovariectomy, that was not bloody) affords them a rich field in which to grow and multiply. If a drop of fluid contains such a host of these ravenous bug-bears, is it possible for Listerism, or any of its modifications, to check their destructive march? But without the adhesions we would not have the bloody serum, and with care we should prevent the contents of the cyst from escaping into the peritoneal cavity.

If these conclusions are admitted to be true, and we think they must be as near the truth as the present infantile state of the whole subject of antiseptic surgery will permit us to come, we must appreciate the advantages of early operative

*“Further, the fluid of a polycyst is always intensely acrid; sometimes so much so as to irritate even the hands of the operator, and the escape of a few drops into the cavity of the abdomen may set up a violent and rapidly fatal peritonitis.”—*Goodell Lessons Gynecology*, p. 293.

interference in ovarian tumors, by which we may avoid adhesions and their consequences.

The question naturally arises, Is there a time, in the history of most ovarian tumors, when they are free from adhesions? We think there is such a time. When the tumor is small, and contained in the pelvic or lower part of the abdominal cavity, it is impossible for it to become adherent to the liver, diaphragm, or upper part of the walls of the belly. More than that, when the tumor is small it turns and rolls about in the pelvis or abdomen with every turn of the patient's body, and its position may be changed every time there is an action of her bladder or rectum. In plastic surgery very limited motion of the parts immediately concerned in the operation is generally sufficient to prevent union, and in the case of an ovarian tumor very slight motion will tear apart tissues stuck together by deposits of lymph. The parts are not allowed to remain in juxtaposition long enough for the lymph to be organized into bands of new tissue.

The fact that we find adhesions in the pelvis does not prove that they formed early in the history of the tumor. We are very much of the opinion that they form after the great size and weight of the tumor fixes it, and prevents motion of that part resting in the pelvis, as well as that in the peritoneal cavity. The cyst is a structure of low vitality, and the great weight of the tumor readily sets up local inflammation in parts of the cyst in contact with the hard, bony parts of the pelvis. As a result of this inflammation, Nature's glue-lymph is poured out, and the parts being fixed, it is organized into bands, or adhesions, which bind the cyst to everything with which it comes in contact. In a large tumor its great size fixes it, while its great weight excites the inflammatory action by which the adhesions are formed. In multilocular cysts, in which the solid matter is great and more likely to be found adherent, adhesions in the pelvis and behind the tumor are more frequently met with, because more pressure is made at these points. If the pelvic adhesions are formed early in the history of the tumor, why is it that we find others just as well organized in the neighborhood of the liver, diaphragm, and upper part of the belly?

If our suggestions regarding the formation of adhesions are good, then it is clear that the operation should be performed while the tumor is small, and before the adhesions have been formed, and we confidently believe that an appreciation of this conclusion will result in good to the patient and credit to the surgeon.

If, however, from any cause there has been an undue amount of inflammatory action, as will sometimes happen—especially in a dermoid cyst or one that has become fixed in Douglas' cul-de-sac, or fixed in any position—then adhesions will form; but such accidents are exceptional and contrary to the usual behavior of an uncomplicated cyst; and even in such cases the adhesions become stronger as time and inflammatory action extends, and the patient suffers more as the tumor grows and drags upon the adhesions. Nothing is gained in such cases by postponing the operation.

What shall we do with the small ovarian cyst that does not seem to grow? One point, we think, can be justly claimed, and that is, that it should be watched carefully and removed as soon as it is found to be growing.

Besides giving time for the formation of adhesions, a postponement of the operation until the tumor is large results in other complications of a serious nature. Every operator, after an ovariectomy, watches with anxiety the action of the kidneys, and no indication is looked upon as more serious than a scanty excretion of urine. As the kidneys are among the first organs to give way under the strain, it shows that there is often functional, if not structural, change, before the operation. Serious disease of the kidneys is often caused by pressure during pregnancy, in which case the pressure is not so great, nor so prolonged as that from an ovarian tumor of large size. In speaking of alterations in the kidney incident to the pressure of fibroids, Dr. S. Pozzi expresses the conviction that "compression of the bladder or uterus ought to be regarded as a distinct indication of the need of operative interference, and may alone be sufficient to justify it." Pressure from even small fibroids, he thinks, is capable of producing serious lesions, such as hydronephrosis, cysts, sclerosis and fatty degeneration, and,

moreover, the existence of disease is often only suspected and not positively known, until the appearance of albumen in the urine. If this is true of the pressure from pregnancy and fibroids, it must be true to an equal if not to a greater extent of the pressure from an ovarian cyst, and is an argument of no little weight in favor of early operative interference before changes of a serious nature have been brought about in the kidneys by pressure.

Is it fair to suppose that the stomach escapes serious injury? Vomiting usually ascribed to chloroform or whatever anæsthetic may be used, is more prolonged and more severe than that which results from other major operations. If the stomach gives way after the effects of chloroform have passed off, and is due to the high temperature, the vomiting is out of all due proportion to the height of the fever. A patient with pneumonia or typhoid fever, with a temperature of 103 or 104°, can take several pints of milk in twenty-four hours, but we could not think of taxing to so great an extent the stomach after an ovariectomy. It is so clearly a weak point that has to be carefully guarded, that we must conclude that the prolonged existence of an ovarian tumor impairs the powers of the digestive organs and puts them in a poor condition to stand the strain after the ovariectomy.

Locomotion, respiration and circulation are also interfered with, and apart from the functional disturbances mentioned, a proper amount of exercise cannot be taken, and the sedentary life, sooner or later, brings about a condition of health unfavorable to operative interference. Temporary relief may be obtained by tapping, but its ill-effects have been recently much dwelt upon, and it is not necessary to reproduce them.

The condition of sub acute, or chronic peritonitis, so often found to exist with large tumors, while not a contra-indication to the operation, must be looked upon as a complication. We think this condition is brought about by the mechanical irritation of the peritoneum by the cyst. If the operation is performed before the tumor is large enough to encroach upon and irritate the peritoneum, this complication may be avoided. The pressure of a large cyst produces sometimes œdema, sometimes atrophy of the anterior abdominal wall, and by

either of these changes the tissues are not found in a healthy condition for repair after an operation, and as a consequence, suppuration and abscesses in the sub-cutaneous cellular tissue along the track of the sutures is of frequent occurrence.

The large quantity of albuminous material in the large cyst is abstracted from the nutritive fluids at the expense of nutrition. Mr. Tait claims that tapping does harm by withdrawing this highly albuminous material from the system. We can understand that this is true if he intends us to infer that by the refilling of the cyst more of the albuminous matter is withdrawn from the system at a further expense of nutrition.

By far the greatest obstacle in the way of an early resort to operative interference in ovarian tumors is the difficulty of distinguishing between the small tumors of the ovary and other conditions in the pelvis which closely simulate them; and when there is a doubt as to the nature of the trouble, practitioners are unwilling to subject the patient to the expense and fatigue of a trip to the specialist. We can easily discover an enlargement in the pelvis, but can not always with ease say positively that the enlargement is extra, and not intra-uterine or peritoneal; or that it is an ovarian and not a uterine tumor; that it is not a hæmatoma, intestinal tumor, or an inflammatory deposit from cellulitis.

After the ovarian cyst has risen out of the pelvis; has left the usual situations of the troubles which simulate it, and has assumed the distinctive characters of an ovarian tumor in the abdominal cavity, the diagnosis is less obscure; but during the time it is growing and assuming its distinct characteristics, some of the complications we have mentioned are being brought about, and the condition of the patient is being changed from one that is favorable for operative interference to one that is, by comparison, very unfavorable. Most operators will recall some few cases in which the operation was so simple in its nature, and so easy of execution, that it might justly be classed as a minor surgical procedure. Mr. Martin, of Berlin, has reported 100 ovariectomies, with 97 recoveries—a mortality less than that following amputations of fingers; and Mr. Tait has just made the following assertion:

"I have little hesitation in saying that, in a series of early operations, where there had been no tapping, the mortality would not be over one per cent." These, and like statements from other trans-Atlantic surgeons, create no little surprise, and would be received *cum grano salis* if made by only one surgeon; but we cannot doubt them, since the experiences of Messrs. Martin, Tait, Keith, Wells, and others so nearly coincide. In a table of 5,153 cases reported in Agnew's Surgery, the mortality recorded is 29.13. In cases in which there were adhesions, the death-rate was 37.01; without adhesions, 20.08; while Goodell says, "By operative skill, by cleanliness, and by wise hygienic measures, the fatality has been reduced to about 25 per cent."*

To open the peritoneal cavity, tap the cyst, draw it outside, and clamp or ligate the pedicle, is a work of a few minutes, and, from a standpoint of danger to the patient, may be compared to that of an exploratory incision. But how the picture changes, in an old case, with well-organized adhesions, binding the tumor to everything with which it comes in contact! Under such circumstances, no operation in surgery calls for a fuller display of those attributes which combine to make the conscientious but bold surgeon. The greatest men that have ever graced our calling have been known to despair, even to the point of abandoning the operation, half finished, when called upon to face such difficulties. Especially is it demoralizing, since the indications by which we can distinguish a good from a bad case are so few and unreliable. We remember Dr. Sims was once examining a case in our presence, and when asked if he could form any accurate idea as to the extent of the adhesions, replied, "only by an exploratory incision." Mr. Tait's illustration of the tablecloth, which hides the scratches, defections, etc., in the table under it, is strikingly true.

So long as the presence of the tumor does not render life unbearable, or in immediate danger, the fears of the patient and those of her attending physician are often lulled into a

* We hear that Tait has published one thousand cases, with a mortality of less than five per cent., and in his book he reports one series of one hundred cases with but two deaths.

state of fancied security; while, if the truth were known, the case is at that very time undergoing changes of a serious nature. Just in proportion to the severity of the local and constitutional disturbance does the obvious and palpable necessity for an immediate resort to an operation impress itself.

We venture to urge that it is an error of judgment to keep these cases out of the hands of the operators until some of the mentioned complications arise. We think that a more extensive recognition of the truth of this conclusion will be an advance of a marked character, and we trust and confidently believe that the time will soon come when our mortality from abdominal surgery will not be comparatively large, and not a matter of regret or mortification.

ART. II.—**Biblical Studies upon Venereal Disease.** By J. EDWIN MICHAEL, A. M., M. D., Professor of Anatomy and Clinical Surgery in the University of Maryland; Professor of General and Genito-Urinary Surgery in the Baltimore Polyclinic; Consulting Surgeon to the Baltimore Presbyterian Eye, Ear and Throat Charity Hospital, etc., Baltimore, Md.

That diseases resulting from impure sexual congress have existed from the earliest times there can be no doubt; but the origin of syphilis is involved in much obscurity, and has given birth to almost as many theories as the origin of man himself. It is held by many that the great outbreak of the disease which occurred in the latter part of the fifteenth century was the beginning of the malady, while other equally respectable authorities believe it to have existed in very ancient times. Bumstead adopts the former view, and in the introduction to his valuable work on "*Venereal Diseases*" makes an elaborate argument in support of it. Ziessl believes it to have existed in remote antiquity. Captain Dabey avers that Chinese literature affords proof that syphilis existed in China, and was treated with mercury before the birth of Christ; and Professor Jones finds unquestionable evidence of the same disease in bones removed from ancient Indian groves in Kentucky and Tennessee.

I do not propose, however, to investigate syphilis alone.

It has already been done *ad nauseam*, and without very much result in the way of harmonizing professional opinion on the subject. Each nation attributes to some other the questionable honor of producing or cultivating the disease. As Zeissl expresses it: "The Neapolitans call it the French disease; the French, the disease of Naples; the Poles call it the German disease; Hollanders and Englishmen attribute it to Spain; the Orientals blame it on the Franks; the Persians on the Turks; the Portugese christen it Castilian; and the Chinese call it the malady of Canton."

Biblical reference to venereal disease, as well as to sexual matters in general, are often plain and direct, and leave no room for doubt as to what is meant. There are, however, a number of passages which have been quoted as proving the existence of syphilis, in which the language is so florid and figurative, and yet the description so inadequate, that it is impossible to determine what is meant. Some commentators are disposed to consider the leprosy described as syphilis, or, at least, to believe that the differential diagnosis between the two diseases was not sufficiently accurate to exclude the latter class. Be this as it may, I think we can scarcely base a belief in the existence of syphilis upon these descriptions. The laws of Moses are, however, very clear about gonorrhœa, seminal emissions, sodomy, onanism, etc. Thus, in Leviticus, xv., 2d verse, we see that "when a man hath a running issue out of his flesh, *because* of his issue he is unclean"; and in the 16th verse of the same chapter: "And if any man's seed of copulation go out from him, then he shall wash all his flesh in water, and be unclean until the even." Again, in the twentieth chapter, 2d-13th verses, punishment is prescribed for those giving their seed unto Molech and those guilty of sodomy. In the same book, chapter xxvii., verse 4, we read: "What man soever of the seed of Aaron is a leper or hath a running issue, he shall not eat of the holy things until he be clean," which seems to show that in those times, as at present, the clergy were not exempt from the gonorrhœa. It is not stated what served in place of the modern water-closet as a means of acquiring it. There is no means of determining whether the

“running issue out of the flesh” was a simple urethritis or the more elaborate result of the activity of gonococci; but I think we are justified in accepting the term as having a meaning about equivalent to the modern popular word “clap,” and as including both the simple and virulent forms.

I have not been able to discover in the books of Moses any distinct allusion to chancroid or syphilis. But the plague which occurred at Shittim may be looked upon as a possible outbreak of the latter disease. In Numbers we read (xxv., 1st and 3d): “And Israel abode in Shittim and the people began to commit whoredom with the daughters of Moab. And Israel joined himself to Baal-peor, and the anger of the Lord was kindled against Israel.” It is true that there is no definite description of the symptoms, and we are only told that there was a plague which destroyed twenty-five thousand of the children of Israel, and was only stayed by the very radical treatment prescribed by Moses—viz: “Slay ye every one his men that were joined unto Baal-peor.” But it is well known that where foreign elements mingle in a sexual way syphilis assumes a more aggravated form. I remember very distinctly the comments of Professor Zeissl upon that subject, in Vienna, during the time of the International Exhibition in 1874, when he had ample opportunity to observe it. The outbreak of lues at Naples in 1494 is attributed to the same cause by those who do not accept that outbreak as the beginning of the disease. Moreover, the fact that the god Baal-peor corresponds to Priapus gives color to the view that the plague was the result of venery, and was possibly syphilitic in character. Moses evidently attributed it to “whoredom,” for later in the pilgrimage, when Israel had overcome Midian, “and the children of Israel took all the women of Midian captives,” the lawgiver was wroth with the officers of the host, and addressed them in this wise (Numbers, xxxi., 15–16): “And Moses said unto them, Have ye saved all the women alive? Behold these caused the children of Israel, through the counsel of Balaam, to commit trespass against the Lord in the matter of Peor, and there was a plague among the congregation of the Lord.” He then applied, as a preventive, the treatment which he

had found on a former occasion to work so well as to cure, and ordered the officers to "kill every woman who hath known man by lying with him."

The plague of emerods which visited the Philistines after the battle of Ebenezer when the ark of the covenant was captured, might possibly have been an outbreak of syphilis, as some suppose; but I think there is little to be said in support of this view. The statement (I Samuel, chapter v, verse 9): "And he smote the men of the city, both small and great, and they had emerods in their secret parts," is not sufficiently full to serve as a basis for diagnosis. The "emerods" mentioned might have been condylmata of the genitals, as they were said to be located upon the "secret parts," and this view has been advocated; but I believe it is much more probable that the Philistines suffered from an aggravated form of piles. Moreover, the treatment suggested by the soothsayers and successfully applied, viz.: "Wherefore ye shall make images of your emerods," would scarcely have succeeded in an epidemic of syphilis.

The sufferings of Job are often referred to as a case of possible syphilis. The oft-quoted verse (xxx, 17), "My bones are pierced in me in the night season, and my sinews take no rest," refers to a condition which might be due to syphilis, but is much more apt to have had no such definite meaning. I hesitate to express myself upon a subject so far beyond me, but my reading of the Book of Job leads me to the conclusion that it is to be regarded as an allegorical poem whose beauty and solemnity is scarcely equalled elsewhere, rather than as a narration of actual occurrences; and it would require something much more full and definite than the above-quoted passage to convince me that a distinct pathological condition is referred to. Verse 30: "My skin is black upon me, and my bones are burned with heat," is to be taken as an expression of anguish in a general way. Moreover, if we are to regard the sufferings of Job as actual, we must remember that they are referable to no transgression, and that he maintained throughout the consciousness of his own rectitude. Chapter xlii, 6: "Wherefore I abhor myself and repent in dust and ashes," refers to presumption,

ignorance, etc., but not to transgression. He specifically denies any improper relations with women (xxxix, 9, 10, 11): "If mine heart have been deceived by a woman, or if I have laid wait at my neighbor's door, then let my wife grind unto another, and let others bow down upon her. For this is an heinous crime; yea, it is an iniquity to be punished by the judges."

The florid, figurative language of biblical poetry adds much to the difficulty of extracting those phrases which refer to actual facts. As I have already said, I consider the Book of Job as an allegorical poem, and would as soon look to it for an account of actual occurrences as to Bunyan's Pilgrim's Progress. But it is different in the Psalms of David. It is true that we have the same richness of language and profusion of the flowers and figures of speech. The effusions of the psalmist are replete with poetic and religious fervor. But he tunes his harp to strains of joy or triumph, or raises his voice in bitter weeping and lamentation for definite cause. Thus he breaks into a song of triumph and thanksgiving to God (Psalm xviii) for delivery from the hand of his enemies and from Saul; or grovels in the dust and ashes of repentance (Psalm li) after his self-conviction in the presence of the prophet Nathan. One can scarcely read the Psalm xxxiii, without believing that there is a definite cause for the ills of the flesh and bones of which he complains, and that cause intimately connected with some transgression of which he has been guilty. "O Lord, repulse me not in thy wrath; neither chasten me in thy hot displeasure. Thine arrows stick fast in me, and thy hand presseth me sore. There is no soundness in mine flesh because of thine anger; neither is there any rest in my bones because of my sin. For mine iniquities are gone over mine head; as an heavy burden, they are too heavy for me. My wounds stink and are corrupt because of my foolishness. I am troubled; I am bowed down greatly; I go mourning all the day long. For my loins are filled with a loathsome disease; and there is no soundness in my flesh. I am feeble and sore broken; I have roared by reason of the disquietness of my heart. Lord, all my desire is before thee; and my groaning is not hid from thee.

My heart panteth; my strength faileth me: as for the light of mine eyes, it also is gone from me. My lovers and my friends stand aloof from my sore; and my kinsmen stand afar off." There is here no such definite description as would warrant us in pronouncing a positive diagnosis of the case, but taken as a whole, it is at least suggestive of syphilis. There is no soundness in his flesh, he has pains in his bones, he is feeble and sore broken, he has a loathsome disease, his wounds stink and are corrupt, the light of his eyes has gone from him (perhaps by an attack of iritis), and his lovers and friends stand aloof from his sore. His depression of spirits and "the disquietness of his heart" are not less characteristic, and he attributes all these evils to his own iniquity. "For I said, hear me lest otherwise they should rejoice over me; when my foot slippeth, they magnify themselves against me. For I am ready to halt, and my sorrow is continually before me. For I will declare mine iniquity; I will be sorry for my sin." Moreover, although David was prophet, poet, priest and king in Israel, and a man of eminent piety, it is known that like many prophets, poets, priests and kings of the present time, he was not averse to making requisitions upon his neighbors' ewe lamb when circumstances were favorable, and there is no doubt but that he had ample opportunity to contract whatever venereal diseases were then prevalent among the chosen people. No doubt he repented in sackcloth and ashes when the weakness of the flesh caused his foot to slip, as in the notable case where he failed to shift Bethsheba's pregnancy on to the shoulders of Uriah the Hittite, her husband, but his contrition as expressed in the Psalm xxxviii seems to have had a more substantial basis than the mere consciousness of transgression.

Solomon has also been accused of having been syphilitic, and no doubt he had ample opportunity with his thousand wives and concubines of becoming so; but I have not been able to find anything in the Bible which seems to justify the accusation. He may have known of such troubles as a result of whoredom, and referred to them in Proverbs v, 11, where he concludes his warning to young men with the words, "And thou mourn at the last when thy flesh and thy body

are consumed." He went after Ashtoreth (I Kings xi, 5) and Ashtoreth is about equivalent to Venus, but he seems to have been no less fortunate than many of our contemporaries who worship at the shrine of the fair but frail goddess without being compelled to wear her crown.

246, *Madison avenue.*

ART. III.—**Further Remarks on the Retinal Spectrum.*** By ROBERT BIRD, M. D., Surgeon English Army—Retired List Cobham, Va.

When sunlight is received directly on the retina through a narrow aperture, or when it is reflected on it from a picture or other object, a shining spot appears on the retina at the place where the light falls. This is the subjective retinal spectrum or image, and it is best seen when the eye is closed with the hand or by something else impervious to light. Now, if we open the eyelid while this is shining in the retina, and cast our glance on a white sheet, we shall see there a colored spot. This is the objective spectrum or image. This latter is dependent for its existence altogether on the former, and any changes which become manifest in this are consequent on corresponding changes which have arisen in that. When the objective image has changed its color or brilliancy, the subjective image also has changed its color or brilliancy. When the one disappears the other has disappeared; and when the objective has reappeared, it is only a sign of the reëpearance of the subjective. The color of the former is complementary of the latter. The retinal spectrum or image is always double; and, to be thoroughly understood, it must be studied in both phases, as the one illustrates and explains the other. Hitherto, in almost every instance, one phase only at a time has been studied by observers; and in this way mistakes and discrepancies have crept into the literature of the subject, and contradictory statements have been made by different observers.

* The author's former remarks on this subject are to be found in (1) *The Indian Annals of Medical Science*, No. XXXV, page 19, 1876; (2) *Indian Medical Gazette*, Nov. 1880; (3) *Medical News*, August 18, 1883.

Having excited a subjective spectrum in the retina of one eye through looking steadily for thirty seconds at a red picture irradiated by sunlight, we find that while this spectrum is of a reddish tint, its corresponding objective spectrum is of a greenish hue. Brewster, Helmholtz and others have attributed the appearance in the objective image of that color, which is the complement of the color exciting it, to fatigue or exhaustion of the retina at the spot impressed by the light reflected from the picture—that is, at the spot where we know the subjective spectrum is shining. They arrived at this conclusion by reasoning thus: “The light reflected from the spot occupied by the objective spectrum, falling on the spot in the retina where the nerves have become fatigued by the rays from the red picture, is there analyzed. The red rays of this light, falling on the nerve structures specialized to admit the waves of red light, are unable to enter because these structures are exhausted and refuse to vibrate; the greenish rays falling on the unfatigued nerve structures specialized to receive these rays, excite vibrations which, branching inwards to the brain, excite there the sensation of green light.” But this conclusion can hardly be the right one, because, during the intervals which mark the disappearance and re-appearance of all these after images, the spot where the objective spectrum or image was (but, for the time being, is not) is *white*, like the rest of the sheet, showing that the light from this spot, which had formerly been split up at the retina, now passes on in its entirety through this structure to the brain, and excites there the sensation, not of green or red light, but of white light. The image reappears, and lo! the white light is split up as before. Again it disappears, and again the white light has reached the brain in its totality, as before. This sequence of events could not take place did the color of the objective spectrum depend on or arise from exhaustion or fatigue of a portion of the retina; and Brewster or Helmholtz could not have made the mistake of thinking that it did, had they studied the behavior of the one spectrum in connection with and in relation to the behavior of the other. For they would then have seen that it is not nervous fatigue, but the inability of two forms of vibration

to exist simultaneously in the same structure, which gives rise to colored images in their objective phase.

The subjective spectrum takes the color of the light which excites it. For instance, let us use pure red light, and we shall find that the *completed*, or fully developed, subjective spectrum is red or reddish; if we use blue light it will be bluish, and if we use yellow light it will be yellowish. Then, in waning towards extinction, each and all of these monochromatically-produced spectra pass through a succession of different colors till they reach the violet, and this passage is always from a color of lower refrangibility into a color of higher refrangibility, and from the left of the solar spectrum to or towards its right. For instance, let us take a red spectrum, and we shall find that as it wanes, the red changes to green, the green to blue, and the blue to violet. This behavior of these monochromatic spectra or images shows two things—first, it shows that the same nerve fibre can be occupied in fairly rapid succession by different streams of vibrations, whose vibrations or waves are of different lengths; and, second, it shows that an elementary light can excite in a nerve a stream (or streams) of vibrations other than that which is characteristically its own. Further, this capacity of monochromatic light to move the retinal nerves, on the one hand, and the capacity of the retinal nerves to be so moved on the other, seem to disprove the theory of Young, “that a certain elementary light can only move certain nerves specially differentiated to receive and transmit its characteristic waves, and that these specially differentiated nerves can vibrate with the definitely-measured waves of this particular elementary light, and with *no other*.”

When the waves of light have become vibrations in the retina and optic nerve, they no longer constitute light, but a modification of it. In their nature they are no longer purely physical, for the purely physical has become mixed up with and in some way governed by the physiological. In this conversion or transmutation, the conditions of their existence are changed, and in their changed state they (the waves) have in their essence become somewhat assimilated to the vibrations of sound, inasmuch as they now operate and pro-

gress in structures resembling a string. This being the case, can it be, also, that the color of the objective spectrum is to the color or vibration of the subjective spectrum what the overtone is to the fundamental tone in the vibration of strings? It has been said above that the vibrations of the completed subjective spectrum begin to shorten when the spectrum is on the wane, and that the shortening continues in regular gradation from left to right of the solar spectrum till the violet is reached. Is this shortening of the waves, or of their corresponding vibrations, characteristic of living structures, as lengthening of the waves in the phenomena of fluorescence and phosphorescence is characteristic of dead organic matter? And is the shortening of the waves and vibrations in the retinal structures typical of what other forms of wave motion undergo on entering into the structures of the other sentient nerves?

It is generally conceded that the image of external things in the first instance appears on the retina in an inverted posture; yet the posture of the subjective image or spectrum, viewed by the eye of consciousness behind the closed lid, is always erect—that is, if the posture of the object looked at be erect. How is this discrepancy to be reconciled? Todd and Bowman suggest that re-inversion of the picture must take place before the vibrations leave the retinal structures, on their way to print the picture on the cerebral tissues. If this be true, then it is probable that the end is attained by the vibrations passing through media of different refracting powers, in the same way as mirages are produced. However the question may be settled ultimately, it is to be affirmed, in the meantime, that while the inverted image has not yet been seen on the living tissues, the erect image can be seen by any one who, after looking steadily for twenty or thirty seconds at some illuminated object, shuts his eye and turns his attention to the shining spot within his impressed eyeball.

The points which the writer is laboring to establish in this paper are—

(1) That objective spectra or after images do not depend on, nor originate in, fatigue of the retina.

(2) That Dr. Young's theory of vision is probably inaccurate.

(3) That the vibrations of the completed subjective spectrum in the structures of the retina and optic nerve are shortened in their progress towards the brain.

(4) That the *retinal* image of external things, as seen by our inner consciousness, is erect and not inverted.

ART. IV.—**Report of Thirty-four Cases of Gunshot Wounds.***

By R. RANDOLPH STEVENSON, M. D., South Vale, Nova Scotia; formerly Senior Surgeon of Gen. J. C. Breckinridge's Brigade, Confederate States Army.

The following cases of gunshot wounds were treated by me in "Buckner Hospital," Newman, Ga., in June and July, 1864, previous to the fall of Atlanta, and prior to my assignment to duty as the Chief Surgeon of the Confederate States Military Prison Hospital at Andersonville, Ga.

The reader will observe that quite a change in remedies and mode of treatment of gunshot wounds has taken place in the last twenty years.

These cases will also remind some of the old veterans of the "Lost Cause" of the sad scenes of the long and bloody conflict on many a hard contested battlefield. I would like to see more of these reports in our medical journals of the South, as most of the medical and surgical history of the late war is to be found only in the archives of the Government at Washington, and consequently in a shape too voluminous and expensive to be within the reach of the medical profession of the present day.

Soon will the veteran surgeons of the "Lost Cause" have to respond to that "long roll-call" that summons to our "eternal camping-ground," and then we will have no chance

* We take pleasure in publishing these reports so as to preserve a part of the Medical and Surgical Records of the late Confederate States, which otherwise might be lost.

All of the gunshot wounds reported in these cases were occasioned by "Minnie balls" except those otherwise stated.

to leave to our friends those evidences of our devotion to a cause, though lost, yet dear to every true Confederate soldier.

The following report is given almost *verbatim* as made in my "Notes of Surgical Cases" over twenty years ago:

(1) *J. M. McGuire*—Private Fifth Regiment Kentucky Infantry, Company "C," æt. 30; occupation, farmer. Vulnus sclopeticum, left hand; ball entering palmar surface; exit near articulation of ring-finger with its metacarpal bone, seriously injuring the latter. Date of injury, May 15th, 1864; admitted to the hospital May 17th, 1864. Lint and cold water dressing. Recovered.

(2) *T. B. Teale*—Private Forty-First Regiment Georgia Infantry, Company "I," æt. 29; occupation, farmer. Vulnus sclopeticum, right knee; entrance near internal condyle of femur. Ball extracted on the field. Date of injury, May 25th 1864; admitted to hospital May 27th, 1864. Lint and cold water dressing. Recovered.

(3) *I. Simalton*—Private Forty-First Georgia Regiment Infantry, Company "I," æt. 20; occupation, farmer. Vulnus sclopeticum; entrance left forearm between extensor and supinator muscles, passing posteriorly, making exit through triceps flexor three inches below insertion of deltoideus. Date of injury, May 25th; admitted to hospital May 27th, 1864. Lint and cold water dressing. Recovered. No ankylosis of joint.

(4) *T. M. Adams*—Corporal Cobb's Legion, Company "F," æt. 23; occupation, farmer. Vulnus sclopeticum; entrance palmar surface between middle and fore-finger, exit near articulation of middle finger with its metacarpal bone. Date of injury, May 6th, 1864; admitted to hospital May 28th, 1864. Lint and cold water dressing. Recovered.

(5) *C. M. Humphries*—Private Fifth Regiment Kentucky Infantry, Company "I," æt. 20; occupation, farmer. Vulnus sclopeticum, left arm; entrance near insertion of deltoideus, exit opposite entrance. Date of injury, May 28th, 1864; admitted to hospital May 31st, 1864. Lint and cold water dressing. Recovered.

(6) *R. P. Landrum*—Sergeant Fourth Kentucky Infantry, Company "A," æt. 24; occupation, farmer. Vulnus sclopeticum; entrance two inches above left ear, ranging posteriorly; exit two inches from entrance; traumatic erysipelas supervened. Date of injury, May 28th, 1864; admitted May 31st, 1864. Tincture iodine locally; iron, quinine and

whisky internally. Lint and cold water dressing. Full diet. Recovered.

(7) *A. J. Thompson*—Private Fifth Regiment Kentucky Infantry, Company "I," æt. 39; occupation, saddler. *Vulnus sclopeticum*; entrance between thumb and fore-finger; exit opposite entrance. Date of injury, May 28th, 1864; admitted May 31st, 1864. Lint and cold water dressing. Recovered.

(8) *I. A. Hathaway*—Private Fifth Regiment Kentucky Infantry Company "A," æt. 20; occupation, farmer. Fragment of shell; entrance, palmar surface; exit, dorsal surface, injuring metacarpal bone near articulation with fore finger, left hand. Date of injury, May 28th; admitted to hospital May 31st, 1864. Lint and cold water dressing. Recovered.

(9) *C. T. Shelah*—Corporal Sixth Regiment Kentucky Infantry, Company "G," æt. 23; occupation, farmer. *Vulnus sclopeticum*; "Minnie" ball; entrance styloid process of radius; exit near articulation of radius with lunar bone, injuring head of radius. Date of injury, May 28th; admitted May 31st. Lint and cold water dressing. Recovered.

(10) *R. A. Philips*—Private First Regiment Georgia Infantry, Company "F," æt. 18; occupation, farmer. *Vulnus sclopeticum*; entrance three inches from mesian line; exit near crest of right ileum. Lint and cold water dressing. Admitted June 18th; date of injury, June 16th, 1864. Recovered.

(11) *R. Hart*—Private Ninth Regiment Kentucky Infantry, Company "B," æt. 18; occupation, farmer. *Vulnus sclopeticum*; entrance near styloid process of ulna, ranging upwards and outwards; exit near head of radius. Date of injury, June 20th; admitted to hospital June 21st, 1864. Lint and cold water dressing. Recovered.

(12) *F. York*—Private Second Regiment Kentucky Infantry, Company "G," æt. 29; occupation, farmer. *Vulnus sclopeticum*; entrance lower third of ulnar, ranging longitudinally; exit near middle third of same; bone shattered; resection. Date of wound, June 10th; admitted to hospital June 12th, 1864. Lint and cold water dressing. Gangrenous after fourth day from operation. Treatment—Free application of fuming nitric acid, with punch, iron and quinine; full diet. Recovered.

(13) *A. F. Lamb*—Private Miller's Regiment Mississippi Cavalry, Company "D," æt. 42; occupation, farmer. *Vulnus sclopeticum*. June 10th; admitted in hospital June 12th, 1864. Left-hand ring-finger; amputation at articulation of

its metacarpal bone. Lint and cold water dressing. Recovered.

(14) *J. P. Harris*—Corporal Fourth Regiment Kentucky Infantry, æt. 23; occupation farmer. *Vulnus sclopeticum*. May 28th; admitted in hospital June 7th, 1864. Entrance, articulation of fore-finger with its metacarpal bone; exit near styloid process of ulnar; right hand; ball ranging posteriorly. Lint and cold water dressing. Recovered.

(15) *J. W. Billings*—Private Seventeenth Regiment Alabama Infantry; æt. 52. *Vulnus sclopeticum*. May 28th; admitted in hospital June 3d, 1864. Entrance, region of great trochanter, right side, ball ranging outwards and downwards; exit three inches from entrance. Lint and cold water dressing. Tendency of wound to gangrene. Local application strong nitric acid. Dressing—Turpentine one part and balsam copaiba two parts, applying daily; wound assuming healthy granulations after third day of treatment. Furloughed June 25th. Recovered.

(16) *J. T. Nolen*—Private Thirteenth Regiment Tennessee Cavalry, Company "L," æt. 20; occupation, farmer. *Vulnus sclopeticum*; ball destroying middle-finger of left hand; amputation above articulation of its metacarpal bone. Date of wound, July 1st; admitted in hospital July 2d, 1864. Recovered after usual treatment.

(17) *J. E. A. Payne*—Private Twenty-Ninth Regiment North Carolina Infantry, æt. 19; occupation, farmer. *Vulnus sclopeticum*; ball destroying part of middle-finger of left hand; amputation middle third of third phalanx. Date of wound, June 30th; admitted in hospital July 2d. Lint and cold water dressing. Recovered.

(18) *J. Young*—Private Seventeenth Regiment Alabama Volunteers, Company "E," æt. 23; occupation, farmer. Explosion of shell; extensive laceration of middle third of left thigh over region of femoral artery. Date of wound, July 4th; admitted in hospital July 5th, 1864. Re-action feeble. Diffusible stimuli. Died July 8th, 1864.

(19) *W. W. Sapp*—Corporal Fifty-Fourth Georgia Infantry, Company "K," æt. 29; occupation farmer. *Vulnus sclopeticum*. Date of wound, July 4th; admitted July 5th, 1864. Entrance of ball, left side near temporal ridge, ranging backwards and outwards; exit near coronal suture, injuring periosteum; secondary hæmorrhage from branch of temporal artery on ninth day after admission. Lint and cold water dressing. Hæmorrhage controlled by application of tinctura ferri perchloridi and cold applications. Recovered.

(20) *J. V. Gaskiro*—Private Seventh Regiment Florida Volunteer Infantry, Company "I," æt. 34; occupation, farmer. Vulnus sclopeticum. Wounded July 4th; admitted in hospital July 5th. Entrance, upper third of inner border of trapezium; exit opposite entrance. Lint and cold water dressing. Furloughed and recovered.

(21) *A. Johnston*—Private Twenty-Ninth Regiment Alabama Volunteer Infantry, Company "K," æt. 39; occupation, farmer. Vulnus sclopeticum. July 4th; admitted July 5th. Entrance, palmar surface of little finger, ranging posteriorly; exit, middle third of its metacarpal bone; amputation of fifth metacarpal bone at articulation with its carpal bone. Lint and cold water dressing. Febris contin. communis supervened on tenth day after admission. Treatment—Fowler's solution and quinine. Recovered.

(22) *E. Rutherford*—Private Fifty-Seventh Regiment Ga. Infantry, Company "D," æt. 30; occupation, farmer. Outer border of upper third of sterno-mastoid muscle, ranging posteriorly, exit middle of trapezius. Date of wound and entrance in hospital not given. Furloughed July 21st, 1864, for thirty days. Result unknown.

(23) *E. M. Mobley*—Private Thirty-Ninth Regiment Mississippi Volunteer Infantry, Company "C," æt. 33; occupation teacher. Fragment of shell; severing little finger and injuring fifth metacarpal bone. Operation—Disarticulation of fifth metacarpal from fourth metacarpus and unciform. Date of wound not given; admitted to hospital July 6th, 1864. Lint and cold water dressing. Furloughed July 23d, 1864. Result not reported.

(24) *G. T. Hall*—Private Seventeenth Regiment Alabama Volunteer Infantry, Company "H," æt. 15; occupation soldier. Vulnus sclopeticum. July 4th; admitted in hospital July 5th, 1864. Entrance, lower third of metacarpal bone of index-finger, destroying articulation of thumb with its metacarpal bone. Operation—Resection of metacarpal bone of index finger and amputation of thumb at articulation with its metacarpal bone. Lint and cold water dressing. Recovered.

(25) *J. Youngblood*—Private Fifty Seventh Regiment Georgia Volunteers, Infantry, Company "K," æt. 34; occupation, farmer. Vulnus sclopeticum; wounded July 4th; admitted in hospital July 5th. Entrance of ball surface of foot, near articulation of little toe, with its phalanx. Lint and cold water dressing. Sent from "Buckner Hospital" with a number of wounded soldiers (July 13th) to Griffin, Ga.,

during Federal raid on Newman, headed by Captain Brownlow, of General Rosseau's Command, which was captured a short distance from Newman, in a few hours, by the vigilance of Generals Rosser and Webster. Result unknown.

(26) *M. S. Beard*—Corporal Ninth Regiment Arkansas Volunteers, Infantry, Company "D," æt. 27; occupation, farmer. Vul. contus. et laceratum; large fragment of shell; July 22d; admitted in hospital July 25th. Entrance near ramus of pubes, ranging downwards and upwards, destroying the hip-joint. Reaction feeble. Died July 27th, 1864.

(27) *R. S. Wells*—Private Sixty Sixth Regiment Georgia Infantry, Company "C," æt. 19; occupation soldier. Vulnus sclopeticum; July 12d; admitted July 25th, 1864. Entrance middle third of right thigh, fracturing femur. Operation:—Amputation upper third; reaction feeble; diffusible stimulants; beef essence; generous diet. Died July 28th, 1864.

(28) *J. A. Mapp*—Private Eighth Regiment Mississippi Volunteers, Company "B"; occupation, farmer. 1st, Vulnus sclopeticum; July 22d; admitted July 25th. Entrance near coracoid process, left shoulder, ranging downwards and upwards, fracturing spinous process of scapula; exit near sixth dorsal vertebra. 2d, Vulnus sclopeticum at same time as above. Entrance near instep of right foot, ranging downwards and outwards, injuring external malleolus of fibula; spiculæ of bone well removed. Lint and cold water dressing for both wounds. Recovered, with slight ankylosis of shoulder and ankle-joint.

(29) *H. Linsey*—Sergeant Thirty-Second Regiment Mississippi Volunteers, Co. "H"; æt. 29; occupation farmer. Vulnus sclopeticum; July 22d; admitted July 25th. Entrance about one inch above trochanter magnus, lodging near hip-joint; ball extracted with screw ball-forceps. Lint and cold water dressing. Recovered, with partial ankylosis of hip-joint.

(30) *J. E. Jackson*—Private Forty-Fifth Regiment Alabama Volunteers, Company "D"; æt. 21; occupation, farmer; wounded July 22d; admitted 25th. Middle third of left forearm, fracturing ulna; spiculæ of bone all removed; same ball; entrance near eighth rib, ranging forwards; exit three inches from entrance. Secondary hæmorrhage occurred August 3d from ulnar artery; controlled with persulphate of iron and slight pressure. Lint and cold water dressing. Recovered.

(31) *J. B. Kirkland*—Private Fifty-Fourth Regiment Ten-

nessee Volunteers; æt. 24; occupation, farmer. *Vulnus sclopeticum*; July 22d; admitted to hospital July 25th. Entrance two inches above left nipple, ranging posteriorly; exit below inferior angle of scapula. Lint and cold water dressing. Entrance and exit both kept well dilated for drainage. Recovered.

(32) *W. T. Baker*—Corporal Forty-Fifth Alabama Volunteers, Company "E"; æt. 19; occupation, student. 1st, *Vulnus sclopeticum*; July 22d; admitted July 25th. Entrance near olecranon, ranging backward and outwards, injuring olecranon process; exit two inches above internal condyle of humerus. 2d, *Vulnus sclopeticum*; same ball. Entrance middle third of fourth rib, ranging upwards and outwards; upper third of sternum. Lint and cold water dressing. Recovered.

(33) *J. Young*—Private Seventh Alabama, Company "E"; æt. 22; occupation, farmer. Explosion of shell, producing concussion of spinal cord, and severely lacerating right thigh. Reaction feeble; injury received July 4th; admitted to hospital July —. Died July 8th, 1864.

(34) *J. D. Suit*—Private Fifty-Second Regiment Georgia Infantry; æt. 25; occupation, farmer. Fragment of shell; July 9th; admitted to hospital July 10th, 1864. Entrance right ramus inferior maxillary; exit near lower third of sterno-mastoid muscle, injuring vocal and respiratory organs, and muscles of deglutition; imperfect nutrition kept up by means of gutta-percha tube. Died July 13th, 1864.

NOTE.—The sick and wounded in General J. C. Breckinridge's Brigade, Army of Tennessee, General J. E. Johnston, commanding, in campaign from Dalton to the fall of Atlanta, were sent mostly to Newman, Ga. (Buckner Hospital), B. M. Wible, Post-Surgeon, to whom, in consequence of ill health, after three years' active field service, I was ordered to report by "Acting" Hospital Medical Director, S. M. Bemiss. These notes were made during my short stay at that place. The Kentucky Brigade was commanded variously by Generals Breckinridge, Hanson, and Lewis.

Papine.—Dr. Geo. H. H. Williams, of Philadelphia, Pa., says: From a somewhat extended experience in prescribing *Papine*, I am led to regard it as the safest and best of all opiates.

Correspondence.

Dr. Lefferts; His Popularity and Practice—Prof. Merrill and Hydrochlorate of Cocaine—Commitment of Insane—Woman's Hospital—New York Hospital—Tenements and Flats—Eminent Young Surgeons—Dr. V. P. Gibney and His Skill—Arrest of Post-Partum Hemorrhage—Cause of Puerperal Convulsions—Phosphate of Silver in Spinal Sclerosis—Hyoseyamia—Opium Habit, etc., etc.

Editors Virginia Medical Monthly:

A coming man is *Dr. George M. Lefferts*. The true specialist is born, not made, and the Professor of Laryngoscopy in the College of Physicians and Surgeons is a man who was not manufactured for his place. In the class room and in the wards at St. Luke's Hospital, he impresses all as a born specialist. His type is that of which came such men as Louis Neckar, of Paris, and his students love him as erst the boys in the *Maternite* loved Neckar. He comes into the class-room, a pale, homely young man, blessed with a sweet smile and grace that wins its many friends. His laryngoscopical instruments and his cases for illustration are already in the room, and after a quiet, succinct introduction, he gives as clear and learned a clinical lecture as the class ever hears from any of the Faculty. Though accounted eminent, he is a man of modesty. "I stand here," he says, before the Academy of Medicine, "in the fear that I may be accused of an undue assumption of authority upon the special topics to which I shall ask your attention." His only boast is, "I am a worker!" And he works well, and for it gets respect. "I thought I had quinsy," said a patient at the hospital, "but Dr. Lefferts says it is an abscess of the tonsil!" Of that same abscess he can tell tonsillar truths that few claim to know. "Ulcerated sore throat!" he exclaimed impatiently. "Except in syphilis it is extremely rare. The vast majority of cases, so-called, are simple catarrhal tonsillitis; but the mistake is the commonest made." Again, few would undertake to mark the narrow line of demarcation between catarrhal tonsillitis and diphtheritis, but he does it in such a conclusive way that the brilliant statistics of "cure of diphtheria"

are not as common here as formerly. His views of treatment are fine. Of nitrate of silver as an abortifacient in tonsillitis, he says, "I have never seen *any* beneficial results follow its use." Of guaiacum, the favorite remedy, he says, "When symptoms of suppuration are manifest, it is worse than useless." Heat, moisture, and counter-irritation are the simple means of treatment in his hands, and of the propriety of scarification he is never in doubt. From inhalation he obtains great benefit, but he regards gargles as inefficient.

That the larynx is no longer a *terra incognita* is due in no small measure to Dr. Lefferts' researches, and the laryngoscope has shown more in his hands than in that of many other observers. He handles anæsthetics with an ease not at all common to his class of specialists. It is maintained by some of his admirers that he has little faucial and laryngeal irritation develop from the use of anæsthetics; but be this as it may, the first stage of anæsthesia touches the throat, and he must be a good throat specialist who fearlessly and successfully employs ether in preparing for an operation in the initially sensitive region. Local anæsthesia of the parts may be of different value, but the amyl preparations lack esteem here, and especially the esteem of the specialists.

Prof. Cyrus S. Merrill, the eminent Albany ophthalmologist, took clinical observance of the new anæsthetic, *hydrochlorate of cocaine*, when he was in Vienna last summer, and after hearing Dr. Kollar read his paper on the peculiar properties of the anæsthetic at the Heidelberg College of Ophthalmologists on September 15th, came home and tested its efficacy at his college clinic last month. Dr. Merrill is a daring operator, but his friends in this city predicted complete failure when it was understood that he was to undertake the thing. Said a well-known specialist to me, "It is a different thing to apply it to the eye, and to do as Kollar is said to have done at the Vienna Throat Clinics. The Viennese surgeon brushed the throat and larynx with the cocaine to produce anæsthesia of those parts for operative work; but it is a risk to try it on the eye!" Dr. Merrill undertook the risk, and succeeded with the operation. What the future is to be is more than any one can guess, but there is a great deal of

talk just now about hydrochlorate of cocaine. It brings out one truism: New York surgeons with a reputation at stake find it convenient to have their provincial brethren do the tasks of experimentation for them. But Dr. Merrill knew what he was about, and now our city operators will embrace the idea that he has brought out.

The periodical talk about the unjust commitment of the insane is a "social feature" in both professional and lay circles. Like the small-pox or municipal reform, it comes up as an epidemic of talk every once in a while. It is discussed at more or less length every time, and then is quietly laid to rest. Last month there came an occasion to take it up again. As if everything depended on it, the question was on every lip, "Is Charles B. Richards unjustly confined in the Sanford Hall Insane Asylum?" The *pros* and *cons* were all gone over in detail, and countless morals were drawn. There is no subject that will agitate the professional mind so deeply, and it is amazing how psychical we can occasionally be! *Apropôs*, a distinguished authority of local practice said testily, "Judge Bartlett should not discharge Richards. He is insane. He has no tendon reflex, and that *per se* means dementia!" Good gracious, I thought, Is not that tendon-reflex phenomena yet exploded! And clinic echo answered, No. But it is of no use as an argument just now, though its absurdity is not claimed. The fashion of looking for lesions in the insane is out of date, but the relation of physical to mental development is approved of more than ever. Of the Dickie case, some time ago, Dr. J. W. Ranney said, "The patient is no lunatic. She is simply small in stature and in intellect!" Let this be remembered when the laws provide jury trial for the insane, as has been so strenuously urged. Let the jury ask, "Is the patient large or small? Has he a tendon reflex?" But we are not in danger of waking up any such measures of reform. The State laws mean well to the insane, but when we get past the sensational stage of the commitment question we grow careless.

Dr. L. C. Gray, of Brooklyn—a gentleman by no means without authority on psychological medicine—says that it is wrong to relegate the study and treatment of insanity so ab-

solutely to the specialist. He argues that insanity is a lesion of the cortex of the brain, and as such is responsive to proper remedies given by general practitioners at home. Naturally the opinion of such a man gives rise to much comment, but few receive it. Twenty-two out of thirty physicians interviewed by me were emphatic against home treatment, though nearly all admitted that many cases of melancholia can be so treated. This is no avenue of escape from the "unjust commitment" question, however; yet a certain proportion of cases can be cured at home, and there is a growing disposition toward favoring insane wards in general hospitals. But in spite of enthusiasm, and fear of "unjust commitments," insane patients must go to asylums. Insane people are not wanted in our city hospitals. Because that some psychises of pregnancy and the puerperal state were treated in the Woman's Hospital that excellent institution is maligned. Do you ask why I say "excellent"?

The statistics of the Woman's Hospital, since its opening in 1855, gives a remarkable retrospect of more than a quarter of a century in the treatment of diseases of women. Not quite one-half of the cases recorded were cured, and one-third of the remainder were improved. Upwards of 1,600 operations have been performed, and the principal causes of death have been peritonitis, septicæmia, and hemorrhage. These two facts alone must suffice, but they are all that is necessary to indicate to the profession that this valued institution is doing a busy and successful work in the best interests of gynæcology.

There is never a time when some of the members of the profession are not criticizing the much-abused New York Hospital. The buildings, not yet seven years occupied, are absolutely perfect in detail, and the arrangements are model in convenience and elegance. But its situation does not please all, and the idea seems to be that it is a monument of prodigal expenditure and downright extravagance. This may not be any one's business, but when money is expended on costly appurtenances beyond the limits for securing the best hygienic conditions, there are not wanting men who think it would better have been kept for purely hospital pur-

poses. Dr. Van Buren was sanguine at the time of the foundation that in the beautiful new pile, "hospitalism" was not henceforth to be feared. Pointing at the approved Listerism, the tiled floors, Turkish carpets, and Eastlake furniture, with fine pride, he said to the writer in the early part of 1878, "Watch the treatment in the New York Hospital!" His pride never retrograded, but the sober fact is that the New York Hospital has ceased to be superior to others in this city. If it wins back the hegemony of its days of plainness, it must in its elegant place bring forth a brilliant surgical record. Some striking work has been done there within a twelve month, and especially is the credit due Dr. H. B. Sands. The portrait of Dr. Gurdon Buck hangs on one of the walls, and the bids for his spirit are in the wards.

But New York physicians in this degenerate year of grace are not building and furnishing hospitals. The average medical man, if he has any building operations on his mind, confines them to that ever-mooted question of tenement-house improvements. There is a substantial improvement accomplished in the condition of city dwellings, and carpenters are putting up houses that the sanitary expert can approve of, and that the Board of Health finds no fault with. Flats are blessings above other houses of the class, and though imperfect, they are not barren of producing good results. In four years the rate of mortality has not decreased wonderfully in consequence of State and city legislation on the subject, but this is perhaps to be accounted for from the fact that the larger part of the building of houses for the poor is done up town, where it is accounted healthy. Our young physicians are petted to consider themselves sanitary missionaries, and the issue will possibly be of a callow nature for some time.

Perhaps it is a mistake to delegate all this sort of work to young men. It might be well to let some of the older practitioners engage in the activities of "missionary work," for undeniably the young physicians are capable of more important work. It is a fact of remarkable color that a vast amount of surgical work is being done in New York by men under middle age, who are dealing with general and special

surgery with steady hands. Some of this work is notable, though the operators are not much lionized for it. I have spoken of Dr. Lefferts, and with him I might mention Drs. Lewis H. Sayre, Martin Burke, F. Le Roy Satterlee, V. P. Gibney, and others of like calibre.

Dr. Gibney is a live man in his specialty. His Yankee patients get at the idea pretty closely when they call him "cute." At the Hospital for the Ruptured and Crippled, I was looking for cases of morbus coxarius, when I came to a bed where lay a youth of perhaps thirteen, under treatment by Dr. Gibney, and to whom my attention was called. I copied a history of the case, as follows: "Patient the child of consumptive parents, but has himself been in excellent health till very lately. Owing to over-exertion he was seized one night with pains on the inner side of his right thigh. In three days he could no longer stand, and taking his bed, placed himself under anodyne treatment. Some fever occurred, and severe pain possessed both hip and knee. In great suffering he entered the hospital. Thigh flexed acutely. No tenderness over sacro-iliac junction. Spine negative. No tenderness in groin or nates. No pain on pressure along the femur. No dullness in iliac fossa. Right thigh one inch larger than the left. Pressure over trochanter causes excessive pain about the knee. Concussion of the joint gives much pain. Abduction, adduction and rotation of thigh impossible. *Diagnosis*: Acute synovitis of the hip."

My companion prophesied a poor prognosis, but some weeks later I found the boy cured. He did not show one sign of joint trouble, and was in perfect health. The treatment was simply rest and counter-irritation, and the nurses told me that the doctor had been absolutely indefatigable in his attentions.

Said a member of the Pathological Society: "Dr. Gibney and young Dr. Sayre always were renowned in the Society for asking questions." In way of admiration of Dr. Gibney, I have taken this remark as a sort of text, and of late have been indulging in interrogation points. In result, I have obtained from some of our *magi* these good things:

A leading German practitioner arrests post-partum hæm-

orrhage by tamponing the vagina with one fist, and preventing the escape of blood by clasping the labia about the wrist with the other hand, an assistant meanwhile making pressure over the uterus.

An enterprising young physician up town is employed to write the didactic lectures and arrange the lecture notes of certain gentlemen of a certain faculty who are not "literary fellows" at all. Why not?

Dr. A. Segar, of Brooklyn, thinks that puerperal convulsions are a symptom of insufficient renal action, and simply part of a uræmic train of symptoms. Dr. A. J. C. Skene says "uræmia is the most important, if not the only, exciting cause of the convulsions."

In spinal sclerosis, Dr. Allen McL. Hamilton uses phosphate of silver (Ag_3, PO_4) successfully. This is a new silver salt of a dark yellow color, and the dose is one fourth of a grain. It produces less gastric irritation than nitrate of silver.

That peculiar sedative, motor depressant, and hypnotic, *hyoscyamia*, is more in favor than ever; and it may be worth remembering that Dr. E. C. Seguin reports as most reliable Merck's crystallizable alkaloid of the drug.

Two operations separated by a period of repose gave a little over a quart of fluid from thoracentesis. No dyspnoea or syncope followed, but the patient died suddenly within twelve hours. Autopsy showed existing emphysema and an hypertrophied heart. Query: Is thoracentesis dangerous in cases in which the lungs and heart are diseased?

Dr. W. F. Kelsey has the idea that stricture of the rectum may be produced by secondary syphilitic ulceration, though as a general rule the secondary ulceration is not deep enough for such result.

Dr. A. G. Genter has been using tripoleth as a material for splints. It becomes very hard, and is both durable and light.

Dr. Edward T. Ely is frank in talking about the results that followed his skin-grafting in the middle ear (myringoplasty). He performed it for chronic suppuration of the part, for the purpose of closing in the cavity of the tympan-

um, and it was not encouraging. But it should not be lost sight of that he used it in some cases where the drum membrane was entirely destroyed. If a considerable part of the membrane was present the experiments might have succeeded better.

Frequency and liberality of the patients' meals at the Bloomingdale asylum is looked upon as a means of restraint of great value, and I am assured that copious feeding is more relied on than the camisole and handcuff.

The State Board of Health is hampered by the small amount of appropriation given them by the last Legislature. They get but \$20,000, while our local board has done away with \$420,000.

The Library of the Physicians to the German Hospital has now about 3,600 volumes of English, French, and German medical periodicals, and is deserving of more patronage than the profession give it.

We hear much of the prevalence of the opium-habit, but I doubt if it is known that there are *at least two thousand* habitues in this city. This is a low estimate, based on the fact that from forty drugstores I learned of 289 such persons. Three-fourths of the number are women, many of them prostitutes. Morphia is the form of the drug most in use, and among the eaters are persons who use sixty grains a day.

Twice of late the actual cautery has been employed here for corneal ulcers. It seems a risk, but in fine reality the red heat diminishes the intra-ocular tension wonderfully.

On dit that Dr. Legaré Wistchnnewetzky, of Taganrok, Russia, the husband of Congressman W. D. Kelly's daughter (herself a physician), is to locate here, and give us one medical sesquipedalian.

W. H. M.

New York, December 20th, 1884.

"I tell you sir," said Dr. — one morning to the village apothecary, "I tell you, sir, the *vox populi* should not—must not be regarded." "What, doctor!" exclaimed the apothecary, rubbing his hands, "You don't say that's broken out in town too, has it? Lord help us! what unhealthy times these are!"

Analyses, Selections, etc.

Hydrochlorate of Cocaine for Burns.—In the *Vienna Med. Wochenschrift*, January, 1885, Dr. Weiss makes the following communication:

December 25th, I was called to Prof. L——. An atomizer which he was using had exploded, the hot steam badly scalding the Professor's lips, nose, eye-lids, cheeks, and forehead. Pain was so intense that I apprehended general convulsions. I sent for sundry topical remedies, amongst them a two-per-cent. solution of hydrochlorate of cocaine. In the meanwhile I covered the injured parts with pieces of cloth dipped in olive oil; on the top of these I applied ice-water compresses, renewing them every minute, without affording the slightest relief. When the medicaments arrived I touched the injured parts with a hair-pencil dipped in the cocaine solution. I had scarcely finished, when all pain had entirely vanished, without any return. At my visit in the evening I found the patient quite easy and in good spirits.

R.

Practical Remarks on the Treatment of the More Malignant Forms of Scarlatina.—Bedford Brown, M. D., of Alexandria, Va., read, in the Section of Diseases of Children of American Medical Association, May, 1884, the following paper, which was published in the *Journal of the American Medical Association*, November 22d, 1884:

Whether the type of malignancy in scarlatina is imparted by the intensity of the infectious poison, by excess in quantity, or because of the extreme susceptibility of the system to its peculiar action, are questions which remain yet unsolved. But that there are certain prominent and important elements or conditions entering into combination, in more or less degree, which give character to the type in all cases having a malignant tendency, there can be no doubt.

Preliminary to the consideration of the treatment of this form of disease, it is proper and necessary that these various morbid factors which unite for the development of the type of malignancy should be carefully investigated and analyzed, with a view of ascertaining and comprehending their full meaning and bearing on the progress of the case, and as a guide for treatment.

During a personal observation of scarlatina extending over a period of more than thirty years, no case presenting ma-

lignant tendencies or characteristics has ever presented itself without the following peculiar features, viz: a very high grade of corporeal temperature; excessive frequency of cardiac action, as manifested by the pulse rate; great debility of the heart, as indicated by the impulse of the organ and the feebleness of the pulse; excessive vital prostration of the muscular and nervous systems; suspension, in great part, of cutaneous action; a notably defective action of the renal organs, as indicated by the very scanty and albuminous urine, showing from a very early stage of these cases the presence of either functional or organic disease of these important depurative organs.

Frequent, and often intense, vomiting occurs, manifesting the very serious impression made by the infectious poison on the great ganglionic system of nerves, and the functions of organic life. We also observe in these cases usually a partial or entire suspension of the functions of digestion or assimilation.

Another, and one of the most characteristic, of these morbid elements is the lymph-adenitis, which forms so often a conspicuous part in the history of the severe forms of scarlatina.

While these simple facts do not explain the peculiar nature of the infection, whether it is germinal or chemical in character, nor its action in disturbing the vital operations of the economy, they are nevertheless facts always associated with the development and progress of all severe or malignant cases, and claim our attention individually as objects of treatment in the most earnest degree.

From time to time various methods or systems of treatment for this affection have been introduced, and practised by our profession. Very recently the antiseptic method has been proposed to be used exclusively as an all-sufficient antidote to the action of scarlatinous infection.

Others regard the pure and simple antipyretic plan, in which cold constitutes the chief element, as superior to all others. The sedative plan, composed of those agents as digitalis, aconite, and veratrum, which reduce cardiac action and slow the pulse, has many and able advocates. Then there is the eliminative method, which I think has not been duly appreciated, by which the portals of the skin and kidneys are opened, and these organs are at once made the sewers of the system for the removal of the pent-up poisonous material which has accumulated from the toxic state of the blood and disintegration of tissue, and which is dangerous to life.

Can the Type of Grave or Malignant Cases of Scarlatina be Modified by the Action of Therapeutic Agents?—In my treatment of the severe forms of this disease, for the last two years, I have acted upon the principle that if the features peculiar to this disease could be modified by treatment, the type of the disease could also be modified to a certain extent, and the case be converted from a dangerous to a benign form.

A very considerable experience during this period has only confirmed this opinion.

I am convinced that many cases of so-called malignant scarlet fever are lost because the disease is regarded as incurable.

Treatment of the More Violent Forms of Scarlatinous Lymph-Adenitis.—One of the most frequent forms of the more severe and malignant types of scarlatina met with is that which is accompanied with very violent and extensive adenitis of the cervical glands and cellulitis. In these cases the fauces and tonsils are usually extensively involved. The infiltration and swelling of the neighboring cellular structures are usually so great as to impede the function of deglutition, and the muscular movements of the neck.

The temperature always rises to 106° or 107° . The pulse is characterized by great feebleness and frequency, often reaching the rate of two hundred per minute.

The functions of digestion and assimilation are for the time being paralyzed. All the indications point to the fact that the blood-making powers are seriously impaired, and the vital condition of the blood is greatly deteriorated.

These cases are exceedingly alarming in character, and if the morbid processes are permitted to proceed unmodified, usually terminate fatally. Can anything be done to modify the type of this class of cases, and avert the tendency to death?

If we reflect for a moment on the two important facts that an over-excited heart is pumping poisoned blood into the inflamed and enormously infiltrated structures of the throat and neck, at the rate of from 160 to 200 pulsations per minute, thereby constantly aggravating the local lesions, while the organ itself is being rapidly exhausted, and that the high temperature indicates a degree of combustion in the vital organism which will inevitably destroy life if not arrested, we are enabled to appreciate the necessity of reducing the action of the heart and the temperature to degrees safe to life. In accomplishing this object, two of the leading factors

—high temperature and frequent pulse—in the process of malignancy, are removed, and if the vital condition of the blood can subsequently be maintained at a standard compatible with life, the chances for recovery will be greatly improved. In my experience, to temporize in these cases is to endanger the life of the patient. Success can only result from prompt and energetic treatment. The high temperature and frequent pulse must be reduced speedily to a point near the normal standard. I have seen the accomplishment of this object in repeated instances convert cases with decided malignant features into the benign type. There are two safe and efficient means always at hand to control high temperature. One is the warm bath, either by the immersion of the body in water at the temperature of 80°, or the wet pack at the same degree, repeated every three or four hours until copious perspiration follows:

The patient is permitted to repose in the wet sheet, enveloped in blankets, the entire body being four hours subject to free perspiration, and of course undergoing the combined antipyretic and eliminative processes. In connection with those measures the sedative treatment is also practised. For this purpose I have found the following formula well adapted:

R Infus. digitalis.....f℥ij.
 Tinct. aconit. rad.....gtt. xvj.
 Spts. ammon. arom.....f℥iij.
 Spts. nitrosi ether.....f℥j.

M. S.—A teaspoonful in water every two hours to a child of five years.

This method of treatment in my experience rarely fails to make a marked change for the better in the temperature and pulse.

In this manner we accomplish two leading objects simultaneously. My rule has been, in those cases attended with excessive inflammation and swelling of the structures of the throat and neck, a very high grade of temperature, and frequent pulse, to reduce the pulse rate and temperature by the combined agency of digitalis and aconite, as rapidly and steadily as is consistent with safety, down to a standard perfectly compatible with life. This peculiar combination I regard as particularly effective in this class of cases, and whatever dangerous or ill effect the one may exert is counteracted by the other.

In this way many cases of the severe form of what is termed the anginose variety with decided malignant tendencies may be robbed in great measure of malignancy of type,

and converted into more simple and manageable forms. With a slow, strong pulse, and a moderately low temperature, the chances for life become at once greatly improved. The combined influence of the sedative and eliminative treatment over the extensive and dangerous swelling of the structures of the throat, usually diminishes the effusion and inflammation permanently, and in proportion to the abatement of fever. Long and continued experience in the use of eliminative measures through the skin and kidneys, principally the former, only tends to increase my high estimation of the great value of this means of treatment in all the more severe forms of scarlatina.

In all grave forms of the affection the skin is particularly dry, and devoid of perspiration. My custom has been, in all of this class of cases, to maintain a free and continuous action of the skin by means of the tepid bath and the wet pack, throughout the course of the attack.

For the purpose of illustrating what may be accomplished in the conversion of a very grave and malignant type of this disease into a very simple and benign form, I will cite the following case: A little boy of six years, in very robust health, in twenty-four hours after the first indications of scarlatina, became alarmingly ill with malignant symptoms. The eruption was imperfect in development; the pulse so frequent that it could not be estimated. There was great stupor. The temperature ranged at about 106° ; the general prostration was correspondingly great. The child was first given a general bath at 80° , then enveloped in a wet sheet at the same temperature, and over this a dry blanket; then put to bed and permitted to luxuriate in a free and delightful perspiration for many hours. When the temperature increased, the same process was resumed. Then he was given a drachm of infusion of digitalis, one drop of the tincture of aconite root and ten drops of sweet spirits of nitre, every two hours, until the pulse and temperature were reduced to near the normal standard. Then the consciousness and vital powers of the little patient returned, and the type of the case in another twenty-four hours was changed from a very dangerous to a very simple one.

Treatment of the True Adynamic Type of Scarlatina.—We occasionally meet with a class of cases presenting from the incipency symptoms of adynamia. The eruption is always of a dark or mahogany color, and not abundant; the pulse is exceedingly frequent and feeble. The urine is dark, very

scanty, and often albuminous. There is excessive stupor and prostration of the vital powers, the tongue a dark red and very dry. We all appreciate the gravity of these cases. The treatment which I have found most efficient in this type of diseases, consists of the wet pack saturated in water at 80°, with a considerable proportion of alcohol combined, used sufficiently often to maintain a moderate perspiration. The following formula I have found the most useful of all of which I have made trial:

R Sodæ sulph.-carbolat.,.....	℥iss.
Sodæ hyposulphit.,	℥j.
Aquæ.....	℥iss.
Infus. digitalis.....	℥iss.
Tinct. nux vomic.,.....	gtts. xij

M.—S. Two teaspoonfuls to be given to a child of five years every two hours. Alternately with this a teaspoonful of brandy and elix. of calisaya are to be administered.

In these cases the temperature rarely reaches a very high grade. The temperature and circulation are both unequally distributed. The extremities are usually cool and livid; the body hot. The action of the heart is excessively feeble and frequent, often reaching a rate of 200 per minute in very young children. The poisoned condition of the blood renders the dangers of thrombosis of the heart, lungs and brain imminent. This condition is particularly encouraged because of the inability of the heart to maintain an equable circulation. Hence in these cases we need especially a remedy which will both slow and strengthen the action of the organ.

The Treatment of the Malignant Type Due to Early Renal Complications.—In a certain proportion of cases the malignancy of type seems to be due to early renal complications. We observe in these cases the early development of malignant features very similar to those manifested in cases of serious nephritis from more simple causes. Thus there is always tendency to coma. The urine is very scanty, high colored, acid in reaction, and albuminous. The temperature is high, and the pulse-rate very frequent. There may be but moderate adenitis, yet the case presents all the indications of gravity and danger.

In all cases of importance I believe it to be our duty to examine the state of the urine throughout the course daily.

Doubtless many cases have assumed the malignant type and ended fatally, solely because of the development of nephritis. In the treatment of these cases, all of our appliances,

consisting of the warm bath, the wet pack, and, if necessary, the hot-air bath, for the purpose of inducing copious elimination through the skin, should be brought to bear on the patient frequently.

Prolonged observation of scarlatina convinces me that our attention is directed usually to renal complication at too late a period of the case, and that treatment is often delayed too long. In cases of nephritic complication with high grade of fever and frequent pulse, I have found that a combination of alkaline diuretics can not only be given freely without harm, but with benefit. In my experience it is best to maintain the urine in a perfectly neutral and bland state, so that its acids can not act as irritants and thereby aggravate the existing inflammation. I have found the following formula a valuable one under these circumstances:

R	Liq. potass. citratis.....	℥iss.
	Potass. bicarb.....	℥ij.
	Spts. nit. ether.....	℥ij.
	Tinct. aconit. rad.....	gtt. xij
	Infus. digitalis.....	℥j.

M A dessertspoonful every two or three hours to a child of five years.

This combination of therapeutic agents usually exerts a most favorable influence over the engorged and inflamed kidneys. Their functions are always improved and generally restored. At the same time the action of the heart is slowed and strengthened; the abnormal temperature is reduced to a point of safety, and the nervous centres relieved.

In connection with this method the patient is fed liberally on skimmed milk.

I do not remember ever to have seen a case of organic renal disease or dropsy following scarlatina in an exclusively nursing infant. Whether this is due to the exclusive milk diet, to the exclusion of animal food, or to the better care or protection from cold is not known.

The Treatment of Protracted Adenitis, followed by Abscesses and Symptoms of Pyæmia.—In the severe anginose form of the disease, protracted adenitis, followed by a long line of abscesses in different portions of the system and symptoms of pyæmia, occasionally occurs. The fever is usually hectic in character. The temperature rises and remits at certain periods of the day, followed occasionally, but not always, by exhausting perspirations. The tongue is usually red and dry. There is complete anorexia; symptoms of adynamia are always present. The process of emaciation is progressive.

These morbid processes may continue in operation for many weeks, and either end in death or restoration.

I have found in this particular affection no combination of remedies so effective as the tincture of chloride of iron, arsenic and digitalis. I usually give to a child of five years five drops of the iron, one-third of a drop of Fowler's solution of arsenic and three drops of the tinct. of digitalis every four hours. This method of therapeutics should be maintained until the pyæmic tendency has been arrested. In this place I regard the arsenic as an important ingredient.

When the tendency to exhausting perspiration is decided, I usually combine the tincture of belladonna.

Treatment of the Convulsions of Malignant Scarlatina.—A history of the treatment of scarlatina would be very incomplete without allusion to the subject of convulsions. Usually in these cases renal complications are present, and must receive a share of our treatment. The pulse in these cases is usually very frequent and the temperature high. The entire voluntary, reflex, and ganglionic nervous centres are all profoundly affected by the infectious poison. To relieve the circulation of uræmic poisoning, which is generally present, and to prevent that irreparable damage to the brain which results from the capillary thrombosis and extravasation of blood that may arise from the violent and unequal action of the heart, our remedial agents should be addressed to the eliminative organs, the reflex nervous system, and the general circulation. Elimination through the skin and kidneys, as heretofore advised, should be assiduously practised. Chloral hydrate, to control the over-excited reflex centres, and veratrum viride combined, have been more efficient in my experience as a means of reducing cardiac action and regulating the unbalanced circulation than any other agents. Five grains of the chloral and one or two drops of tincture veratrum act well after the functions of the skin have been restored. These remedies should be repeated every two hours to a child of five or six years until the object has been attained. In dangerous cases of this kind I regard the use of the veratrum as an important addition to the treatment. In my own hands, when combined with chloral, it has been more prompt, energetic, and decided in repressing the convulsive tendency than any other therapeutic agent.

Treatment of Scarlatinous Pharyngitis.—After a trial of the various local remedies devised by myself and recommended by others, I have reached the conclusion that a combination of astringent and antiseptic agents, composed of bromo-chlo-

alum ℥j, the antiseptic vegetable compound known as Listerine ℥ij, pulverized alum ℥ij, carbolic acid gtt., diluted with rose water ℥iv, either used by means of gargling, the atomizer, or brush to the inflamed surface, constitutes the most valuable of all the local applications. I feel sure that the absorption of the antiseptic properties through the mucous surface is in such quantities as to exert decided effect. Two or three drops of carbolic acid, when applied to the cervix of the uterus, will be tasted by the patient almost instantaneously.

I have faith, also, in the value of antiseptic agents applied to the cutaneous surface. When carbolic acid, salicylic acid and ointment of rose water in combination are applied to the skin, they act not only as an emollient, allaying inflammation and irritation, but the antiseptic agents being spread over a vast extent of surface, are largely absorbed, and exert their peculiar influence in correcting the septic processes going on within the system, thus saving the digestive organs the ill effects of their influence.

In the selection of nourishment we should be influenced both by the condition of the digestive organs and the renal functions. In cases of seriously impaired digestion, irritable stomach, scanty, albuminous and acid urine, the best method of administering nourishment, in my experience, is in the form of skimmed milk, containing a small amount of bicarbonate of soda in solution, and combined with one-third lithia water. This may be continued so long as these symptoms exist.

In all serious cases preference is given to the alkaline lithiated milk as a constant diet. The milk is evidently better digested and assimilated than any other form of nourishment. It is in this form exceedingly bland and unirritating to the renal passages, and affords relief to the engorged and inflamed kidneys. It is given abundantly, and almost exclusively. This form of diet not only serves a good purpose during the acute stages of the disease, but acts well as a prevention of renal sequelæ.

Preparation of Liebig's Food.—Dr. E. T. Williams, in the *Boston Medical and Surgical Journal*, of Nov. 13, 1884, says:

"The idea of using malt as an artificial digestive for starch was certainly a brilliant one, and seemed to promise an infallible cure for every form of starchy dyspepsia, both in children and adults. The notion of a manufactured Liebig's food, prepared to hand and ready for use, was a natural con-

ception, and has much in its favor. This does away with cooking, and secures a perfectly uniform product. One of Liebig's sons, with the 'help and approval' of his father, as he states, is or was concerned in the manufacture of such an article, under the name of an extract of Liebig's food. Similar preparations have been sold in England and America. They are made, or should be made, by digesting malt and water in the form of a 'mash,' as brewers do, till the starch changes to glucose, and then evaporating to dryness in a vacuum. They are nothing more than Liebig's food ready made and evaporated down for convenience of keeping and dispensing. The popular Mellin's and Horlick's foods are articles of this sort. They consist mainly of grape sugar with the nitrogenous and mineral elements of grain. A half-pound bottle of Mellin's food cost seventy-five cents, a one-pound can of Horlick's food sells for the same price. They are good foods, and suit children extremely well. Liebig recommends the food as a nutritious drink for adults as well as children. Its suitability for invalids and convalescents, for nursing mothers and starchy dyspeptics goes without saying. Liebig recommends it in coffee in the place of cream. I have found it very good in chocolate. With coffee especially, in the style of *café au lait*, I have found it a capital breakfast drink. I think that both coffee and chocolate *a la Liebig*, if they could be made fashionable, would make a most useful addition to our dietary."

Boric acid is hard to powder, but the work may be facilitated (says the *Pharmaceutist Post*) by first warming the mortar by burning some alcohol in it, then putting in the acid, and adding a very little glycerine.

A Filled Chow-Chow Jar.—A quack advertisement in an Oxford, N. C., paper says:

"DEATH TO WORMS.—*Ridgway, S. C.*—Gents have quite a demand for your 'Worm Killer.' It is the best Vermifuge I can get. A farmer bought a bottle of me a few weeks ago, gave one dose to his child; came in next day with a chow-chow jar filled with worms the result of the one dose. Since then all want it.

W. J. DAVIS."

Who wants a bottle of chow-chow thus filled? [The bad grammar, punctuation and typographical appearance of the above are not due to ourselves nor to our printers.]

Book Notices, &c.

The Pathology and Treatment of Gonorrhœa. By J. L. MILTON
Senior Surgeon to St. John's Hospital for Diseases of the Skin. London, Eng.
Fifth Edition. New York: Wm. Wood & Co. 1884. 8vo. Pp. 306. (For sale
by West, Johnston, & Co., Richmond, Va.)

This handsomely cloth bound volume is the February issue of Wood's Library of Standard Medical Authors, and the selection of this work, even on that over-done subject of gonorrhœa, is a most excellent one. We have often thought that the member of this publishing firm who selects the books for each year's "Library" is certainly possessed of a more than ordinary taste for this kind of work, as his selections—as a rule—are exactly those which are thoroughly suited to the wants of the profession. We should think that nearly every doctor in active practice ought to secure with pleasure the twelve volumes each year published in this series for the amount charged—\$15.00 per annum. There is no other manner by which a physician can provide himself with standard publications at almost a nominal price. The publishers referred to deserve even a more extended patronage than they enjoy at present for the enterprise and liberality exhibited in their "Library of Standard Authors," albeit each year's "set" is well subscribed for. The only fault we can find with the system is the fact of the impossibility of procuring one special volume out of the entire twelve to replace a lost one. If there were some way to buy a duplicate occasionally we think it would increase the popularity which the present form of publication has secured.

The book before us has attained, during the last few years, an excellent reputation in England as one which was well adapted to the daily needs of the general practitioner. No attempt has been made to put it in form for a medical class—it is prepared for the busy doctor. Good as the earlier editions have been, this—the fifth—is a decided improvement on them all, for, although a considerable number of "cases" have been omitted, such a quantity of important practical matter relating to gonorrhœal, pericardial and heart affections, those of the spinal cord and pleura, etc., has been added, that much of the book may be called new. We cannot remember having read a more interesting account of the history of gonorrhœa than is given by this author, and while we may not fully agree with him in all his beliefs concerning the treatment of the disease, we must credit him with

justly describing those forms of therapeusis which are most commonly employed by specialists and the best English general practitioners. He answers a number of theoretical questions which have been asked in relation to this disease, and demolished in a very complete manner some of the ridiculous ideas held concerning the pathology of a few of the different links in the chain of gonorrhœal sympathetic irritation. The work is written in such a way that the reader feels that he can trust the deductions drawn by the author from his own and other's experience, and that following his advice concerning treatment it will be difficult to stray from the right path. A very good index accompanies the volume and is worthy of notice because we so seldom meet with books containing first class indices. C.

Courier-Review Call Book. A Physician's Pocket Reference Book and Visiting List. Arranged and Prepared by E. M. NELSON, M. D. Ph. D. Editor St. Louis Courier of Medicine, etc. St. Louis, Chicago, Atlanta: J. H. Chambers & Co., 1883. (From Publishers.)

This visiting list, neatly bound in red morocco, with flap although larger in size than most publications of the kind, is still not too large for an overcoat breast pocket, and is gotten up in such a way that it may be used during 1885 or any other year. It is, we must confess, an exceedingly handy thing to have the monthly date of each day in print in a book of this kind, but we have more than once wished for a "call-book" fashioned after the pattern of the one in question—that is, one in which the dates are not put down—because in this case each page may be used during any week of the year. This is without doubt a great advantage to a doctor with a "slow" practice—especially the young practitioner just starting out in his life-work. The printed matter is fully equal to the average in works of like nature; the editor has evidently desired to make this portion of the book something which can be readily referred to by the doctor in emergency cases. There is no ambitious attempt made to supply the place of a manual on such matters, but simply to give in plain terms, that information which is likely to be needed in a time of hurry. The following represents the most important portion of the table of contents;—Diagnostic Table of Eruptive Fevers, Treatment of Poisoning, Artificial Respiration, Posological Table, Doses for Hypodermic Use and for Inhalation, Children's Doses, Clinical examination of Urine, Diabetic Diet Table, Directions for Care of Batteries, etc. These full pages of printed matter are

followed by the excellent system of blank leaves above referred to. Altogether we should say that this "call-book" would suit a great many practising physicians. C.

System of Practical Medicine. By American Authors. Edited by WILLIAM PEPPER, M. D. LL. D., Provost and Professor of Theory and Practice of Medicine and of Clinical Medicine, University of Pennsylvania. LOUIS STARR, M. D., Clinical Professor of Diseases of Children in Hospital of University of Pennsylvania. Vol. I. *Pathology and General Diseases*. Philadelphia: Lea Brothers & Co. 1885. Royal 8vo. Pp. 1094. (From Publishers.)

We are sorry that we are unable to announce the intended limits of this "System of Practical Medicine." But if so much as a volume of such size as the one before us is devoted only to "General Pathology, Sanitary Science and General Diseases"—such as the continued, eruptive and malarial fevers, mumps, erysipelas, diphtheria, cholera, plague, leprosy, epidemic cerebro-spinal meningitis, pertussis, influenza, dengue, rabies, glanders, farcy, anthrax, pyæmia, septicæmia, puerperal fever and beriberi—it is safe to predict the forthcoming of at least four or five other volumes of like size to complete the work. The design is a good one—that of selecting American authors for American practitioners. But in two or three instances in the first volume (of which there are twenty-one eminent authors), we are afraid the writers did not keep this design sufficiently well fixed in their minds while preparing their papers. The Author distinctly states the object of this *System* to be the "presentation of the whole field of medicine as it is actually taught and practised by its best representatives in America." Such being the aim of the Editor, which is well directed, we would have preferred that more of the distinctively *American* practice had been brought out by the two or three authors to whom the remark above makes allusion. So much of our systematic medical literature is borrowed from foreign countries that we fear the loss of much that is original and valuable which is constantly coming out in the journals of America. Germany has its Ziemssen's *Cyclopædia*, Great Britain, its Reynolds' *System*, etc., Now America wants a work of its own. We trust that the writers for subsequent volumes of the present *System* will keep this object of the Editor constantly in their mind's eye. Of course nothing we have said warrants any accusation against us that we would eschew anything that is of value in foreign works or journals.

We have already named the subjects treated of in the

volume now under notice. Nearly all of the subjects mentioned has a special author. Of the 21 contributors to this volume, 6 are from Pennsylvania, 5 from New York, 2 each from Louisiana and Massachusetts, and 1 each from the U. S. Army, Missouri, Illinois, Rhode Island, New Jersey and one from Japan. The authors are, as a rule, well suited to write upon the topics assigned them. In fact, the Editor asked the authors to "treat subjects selected by themselves."

This "System of Medicine" will soon become the standard work of this country, as it deserves to become, and then it will be eagerly sought by practitioners in foreign lands. Let the graduate who is just beginning to build up his library for permanent use be sure to add this work to his collection, for it will remain authoritative for years to come. The volume is finely issued, with neat type and durable binding. A copious index, covering fifty pages renders easy ready reference to subjects. Every practitioner should secure the books as issued. We regret that we cannot state what the price of the completed 'System' will be.

Conversation between Drs. Warren and Putnam on the Subject of Medical Ethics, etc. By FRANK HASTINGS HAMILTON, M. D. New York and London: Birmingham & Co. 1884. 12mo. Pp. 129. (From publishers.)

This interesting little book, by one of the first surgeons in America, we can heartily recommend as thoroughly readable to our friends. We are satisfied that on whichever side our readers stand, as regards the much-vexed question of the "code," they will enjoy the contents of the volume. Dr. Hamilton is an "old code" man, and the views presented here, with the manner of their presentation, are certainly entitled to most serious reflection. He believes that the question is one of importance, not only to the profession at large, but also to the public, and has therefore taken advantage of a season when convalescence from illness gave him an opportunity to write the articles which are here gathered together in a form for preservation. He feels strongly on the subject, and, as is to be expected, presents with a greater degree of thoroughness the views and arguments of the side which he has adopted. Some of his points are most excellent. For instance, when Dr. Warren, the "new code" sympathizer, asks, why, if physicians need a strict code of ethics for their government, should not both lawyers and clergymen require also something of the same kind to place them

under a similar discipline, Dr. Putnam shows plainly that the code under which they work is in both cases even more "iron-bound" than that of our profession.

If our readers desire to arm themselves with some of the best arguments against that plaything of medical science—true homœopathy—we can refer them to no better source for their weapons than this volume. They will find in it, we think, ideas and modes of expression which have not before been so plainly brought to their notice. Dr. Hamilton is a talented writer on surgical subjects, as we all know, but in this book he shows his power as a controversialist of high order. We may perhaps differ with him on some points, and have our own opinion upon this "code" question, but we cannot but advise our friends to read this little work, to secure a full idea of the "old code" position. C.

International Encyclopædia of Surgery. Edited by JOHN ASH-HURST, JR., M. D., Professor of Clinical Surgery in the University of Pennsylvania, etc. In Six Volumes. Vol. V. New York: Wm. Wood & Co. 1884. Royal 8vo. Pp. 1207-xxxvi. Cloth. (For sale by West, Johnston & Co., Richmond.)

The title-page calls this "a systematic treatise on the theory and practice of surgery by authors of various nations," Dr. Chas. B. Mancrede, of Philadelphia, writes on "Injuries of the Head;" Dr. Treves, of London, on "Malformation and Diseases of the Head;" Dr. E. Williams, of Cincinnati, on "Injuries and Diseases of the Eyes;" Dr. A. H. Buck, of New York, on "Injuries and Diseases of the Ear;" Dr. G. M. Lefferts, of New York, on "Diseases and Injuries of the Nose;" Dr. A. C. Post, of New York, on "Injuries and Diseases of the Face, Cheeks, and Lips;" Dr. Chris. Heath, of London, on "Injuries and Diseases of the Mouth, Fauces, Tongue, Palate, and Jaws;" Dr. N. W. Kingsley, of New York, on "Surgery of the Teeth and Adjacent Parts;" Dr. G. H. B. Macleod, of Glasgow, on "Injuries and Diseases of the Neck;" Dr. J. Solis-Cohen, of Philadelphia, on "Injuries and Diseases of the Air Passages;" Dr. E. H. Bennett, of Dublin, on "Injuries of the Chest;" Dr. Thos. Annandale, of Edinburgh, on "Diseases of the Breast;" Dr. Henry Morris, of London, on "Injuries and Diseases of the Abdomen;" and Dr. John Wood, of London, on "Hernia." Certainly this volume is Anglo-American, if not, in a higher sense, "international," so far as the selection of authors is concerned.

Such a book as this, it is impossible for us to review in

the few pages allotted to the department of "Book Notices," etc., in this journal. Hence we have only to summarize our opinion of the *Encyclopædia* as a whole in the statement that we regard the work as invaluable to every practitioner who undertakes surgery, or seeks for the approved surgical doctrines and practice of to-day.

The forthcoming Volume (VI) will complete the "International Encyclopædia of Surgery," and the six volumes will form a library of over 7,000 extra-large octavo pages, from which information may be secured on almost every surgical proposition or procedure that is well established by surgeons of America or Great Britain. Each volume has an index of its contents. Perhaps it would have been an advantage to the surgeon in hasty search for information on any given subject had the publishers placed on the back of each book an abbreviated statement of its contents. This would have assisted one in quickly looking up a subject. As it is, the reader will be almost compelled to take each book from the shelf and examine the "Table of Contents" or the "Index" of each volume to find the chapter he wants to consult. This objection, however, may yet be satisfactorily met by furnishing a *general* or complete index of all six volumes as a part of Volume VI, now to be published.

Plain Facts for Old and Young. By J. H. KELLOGG, M. D., Member Michigan State Board of Health; Medical Superintendent Battle Creek Sanitarium, etc. J. F. Segner, Burlington, Iowa. 1884. 8vo. Pp. 512. Sheep. (From Agent.)

The prime object of this book is to "call attention to the great prevalence of sexual excesses of all kinds, and the heinous crimes resulting from some forms of sexual transgression." That such a work is needed for popular information there can be no doubt. Our profession has been too reticent about such matters, even in their own specially-designed books and journals, so that it is sometimes an amusement to hear even doctors attempt to instruct their patients on the subject.

Were we to critically review the strictly medical propositions of our author, we would have to dissent from some of his views. For instance, he thinks woman does not possess the same power of abdominal respiration as a man, because of her habits of dress—such as corseting, lacing, etc. It would be easier to explain the difference in the mode of respiration of the two human sexes by remembering the fact that woman

is created to bear children, and hence the abdominal portion of her body, when pregnancy exists, is occupied by the enlarged uterus, which allows of no respiratory distension of the abdomen. Again, as a result of the long-waged war of physicians against tight lacing, our ladies have become more moderate, until now *tight* lacing has almost gone out of fashion. But men have taken up the practice by discarding suspenders, and now very generally depend upon the waist-buckle, which binds their clothing tightly around their abdomen, and yet abdominal respiration remains marked with them. The fact of the natural difference in the modes of respiration of the two sexes is too well recognized to permit of denial. It is of providential devising in the case of woman.

But it was not our purpose to enter upon any discussion of the various points made by the author. We intended simply to express an opinion as to the merits of the book as a whole. If we could only get our parents to read this book, and with discretionary prudence impart the information it contains to their growing-up children, great good would result. If young married couples were to practise the lessons so well taught by the author as to sexual excesses and sexual abuses, much good would result. If the matured man or maiden would submit himself or herself to the teachings of this work, much mental anxiety and physical distress would be warded off. We cordially commend the book to the class of readers for whom it is intended.

PAMPHLETS, REPRINTS, ETC., RECEIVED, for which we have no room for fuller notice, etc.; but most of which can be obtained by enclosing a letter stamp for pamphlet to the respective authors named.

Treatment of the Various Forms of Acne. By GEORGE H. ROHE, M. D., Professor of Hygiene and Clinical Dermatology, College of Physicians and Surgeons, Baltimore, Md., etc., [A good treatise on the treatment of this most unpleasant affection.] (Reprint from the *Medical Chronicle*, May, 1883.) Pp. 7.

Report of the Board of Directors and Superintendent of the Western Lunatic Asylum at Staunton, Va. For the year ending September 30, 1883. [This report contains specially interesting matter because of a full account of the circumstances of the mysterious poisoning occurring at the institution on the 24th of February, 1883.] Pp. 45.

Pemphigus and the Diseases Liable to be Mistaken for it. By the same author. [A descriptive essay upon this frequently mis-diagnosed skin disease.] (Reprint from the *Medical News*, June 23, 1883.) Pp. 11.

Hints on the Treatment of some Parasitic Skin Diseases. By the same author. [This small pamphlet will amply repay perusal by the general practitioner.] (Reprint from the *Medical Record*, June 2, 1883.) Pp. 11.

The Ophthalmia of Smallpox. By HERBERT HARLAN, M. D., Surgeon and Lecturer on Ophthalmic Surgery at the Presbyterian Eye and Ear Charity Hospital, etc., Baltimore, Md., [This shows an excellent plan of treatment for this distressing complication.] (Reprint from the *Maryland Medical Journal*, May 15, 1883.) Pp. 4.

The Antipyretic Treatment of Typhoid Fever. By G. C. SMYTHE, A. M., M. D., Professor of Principles and Practice of Medicine, Central College Physicians and Surgeons, Indianapolis, Ind. [An interesting paper read before the Medical Society of the Mississippi Valley, Sept. 19, 1883.] Pp. 24.

Singular case of Vertebral Disease Associated with Tumor in the Abdominal Cavity, etc., By RICHARD MOLLENHAUER, M. D., Physician to the North-Eastern Dispensary, New York City. [A report of a most exceptional case.] Pp. 23.

Protection and Free Trade To-day. By ROBERT P. PORTER, Boston, Mass. [This pamphlet although written entirely from the protectionist standpoint may be read by friends of both sides with profit. It presents the latest views of protection written by a gentleman who has personally investigated the subject of labor both in England and in this country.] Price 10 cts. Published by James R. Osgood & Co., Boston, Mass. 1884. Pp. 48. C.

[We regret not having space in this number to add other of the many book notices prepared. They will appear as rapidly as possible in successive issues of the *Virginia Medical Monthly*.]

Editorial.

How to Utilize Society Transactions.—Of the great amount of lost medical literature, it has been conceded that none is more completely lost than many of the valuable articles that are prepared for the Transactions of State Medical Societies. In fact, so fully recognized is this fact that some authors, after reading their papers before the open sessions of the Societies, ask for the return of their manuscripts in order that they may be published in some more prominent manner. A principal cause for this action is because Society Transactions when published separately rarely have a circulation beyond the membership of the Society itself—unless it be with exchanges, when they are oftentimes stored away without even the wrappers being broken, and thus the Transactions soon become rubbish.

The Nebraska State Medical Society has adopted a happy suggestion, which works well and which we heartily commend to the attention of other State Societies, and would urge the adoption of some like plan by each and all the State Societies of the country. In a nutshell, the plan consists simply in the regular appointment of reviewers or analysts of all exchanges—one member taking charge of one or more Transactions of other State Societies, of which Transactions he makes an analytical report at each annual meeting. For instance, Dr. Alexander Bear, of Norfolk, Nebraska, this year has charge of the Virginia Transactions of 1884, as of a few other like volumes. He will report at the next annual session of his Society what is of interest in these works, which report will in turn be published in the Nebraska Transactions. Suppose such a plan were adopted by all the State Societies of the country, then the Society Transactions of any State would be eagerly *sought after* by authors as the media for their productions, with a knowledge that their papers would have a wider circulation among the profession than by any other plan as yet adopted.

We append the text of the Nebraska Society resolutions: "The Committee on Foreign Correspondence shall consist of one duly accredited representative (a member of this Society), for each State and Territorial Medical Society. They shall receive and review the Transactions of the Societies which they represent, and through their chairman, the Corresponding Secretary, present annually a report of the ad-

vances in medicine made by said Societies. They shall also report such other matters as their Societies may wish to communicate to the Nebraska State Medical Society.

"It shall be the duty of the representative of any Foreign Society to communicate all advances in matters medical and governmental made by said Society in the year just past as well as all matters of whatever kind his Society may wish to be brought to the notice of the Nebraska State Medical Society, to the Corresponding Secretary of the Society, as chairman of the committee. And, finally, the representative shall guard to the best of his ability the interests of his Society, where and whensoever it is demanded.

"Representatives shall hold their credentials, duly signed by the President and Secretary of the Society to whom they stand accredited; which credentials shall be forfeited whenever the representative shall fail to comply with the requirements of his office."

Annual and Seasonal Climatic Maps of the United States.—We have received from the author, Dr. Charles Denison, of Denver, Colorado, a copy of this wall map, which must prove of great service to invalids needing climatic treatment, to climatologists and to scientists in general. These maps will be alike serviceable to physicians for their individual study, and also for directing patients as to what sections of the country they should visit in search of suitable climatic treatment. The map (size 58x41 inches, nicely mounted on muslin as a wall map, price \$5,) presents the four seasonal charts on one side and the annual climatic map on the other. A descriptive circular is sent when filling every order for these maps. The "Annual Map" shows at a glance the relative cloudiness of different sections of the United States, the average temperature, amount of rainfall, the usual directions and effects of winds, the elevations above sea-level of various parts of the country, relative and absolute humidities of the air, vapor tension, etc. The "Seasonal Charts," on the reverse side of the map, show all important climatic data in quarterly divisions. The divisions of climate adopted by Dr. Denison are well founded and furnish suggestions which are often needed as to the contrasts between winter and summer in given localities. The maps have only to be seen to be fully appreciated. Much other information is furnished by an examination of them which our want of space does not allow us to indicate, but everything points out the painstaking care and honest endeavor, at great expense, of Dr. Deni-

son to furnish a useful Map. Agents are wanted for its sale in Virginia, West Virginia and North Carolina. For the present, address Dr. Charles Denison, Denver, Colorado.

Diagram and Key of Parliamentary Rules.—By URIAH SMITH. We have received from the publishers—Review and Herald Publishing Association, of Battle Creek, Mich.—a neatly-bound copy of this useful pocket-book, which bears the imprint of 1883. Price, by mail, 50 cents. In addition to the “Diagram and Key of Parliamentary Rules,” it contains “concise hints and directions for conducting the business of deliberative bodies.” Practically, it consists of a condensation, in *tabular form*, of rulings, as laid down in *Jefferson’s Manual*, *Cushing’s Manual*, and *Roberts’ Rules of Order*, than which there are no higher authorities in this country. The Diagram is unique, and by a glance of the eye enables the party to judge at once of the correctness or error of parliamentary rulings. Since doctors, as a class, are poor parliamentarians, and since there are now so many society organizations among them requiring the exercise of proper rules of order, etc., we would call their special attention to this book with our fullest endorsement. Particularly ought the presiding officers of medical societies to study this concisely- and accurately-prepared Diagram, and keep a copy constantly on their tables during the sessions of their organizations.

American Rhinological Association.—During the session held in St. Louis, Mo., during October, 1884, quite a number of excellent papers were read, and much interest and earnestness were manifested on the part of all members in attendance. The following officers were elected for the current annual term: Dr. P. W. Logan, Knoxville, Tenn., President; Dr. Allen Devilbis, Fort Wayne, Ind., First Vice-President; Dr. J. A. Stucky, Lexington, Ky., Second Vice-President. The next annual session is to convene in Lexington, Ky., during October, 1885.

Seven Springs Iron-Alum Mass.—This excellent remedy meets with special favor wherever it has been used. Of its efficiency and importance in the treatment of certain classes and conditions of diseases there can be no doubt. Every physician of any experience knows something of the difficulties presented in the advertisement on the third page, and as there is no lack of such patients, we bespeak for the “Iron-Alum Mass” a large demand.

The Medical Examining Board of Virginia is called to meet at the Exchange Hotel, in the city of Richmond, on Wednesday, April 8, 1885, at 10 o'clock A. M., for the purpose of examining candidates for license to practice medicine in this State, and for the transaction of such other business as may be brought before it. William C. Dabney, M. D., Charlottesville, Va., President; H. T. Nelson, M. D., Charlottesville, Va., Secretary.

Obituary Record.

Dr. George William Pollard died at his home, near Aylett's, Va., December 5, 1884. He was born at Edgehill, King William county, Va., about 1844. He was the son of Dr. William George Pollard, who was killed during the battle of Sharpsburg while in command of the Fifth Virginia regiment. Dr. George William Pollard joined Mosby's command near the close of the war, and well performed his duties as a Confederate soldier. He graduated in medicine from the University of Virginia since the war. He was a bright Mason, a good man, an excellent physician, generous by nature, and was universally beloved. He joined the Medical Society of Virginia in 1877, in which he was an active member, and from which he received honors which he never sought, but of which he was more than deserving. His modesty amounted almost to a fault. He contributed several valuable papers to the pages of this journal, and, as a warm friend of ours, we shall feel his loss more and more as time wears away.

Dr. James Dunn, of Petersburg, Va., died at his home, January 19, 1885. A higher compliment to his record could scarcely be paid to his memory than the simple statement, made through the Associated Press telegram, that he was "one of our leading physicians," and that "he was a man of noble character, and was universally beloved by all who knew him." This is a high compliment, to one who knows the special merit of the doctors of Petersburg.

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RICHMOND, FEBRUARY, 1885.

Original Communications.

ART. I.—The Influence of Naso-Pharyngeal Growths, Obstructions, and Hypertrophies Upon the Hearing, with a Few Cases in Point.* By JOSEPH A. WHITE, M. D., Senior Surgeon of the Richmond Eye, Ear, and Throat Infirmary, Richmond, Va.

About eighteen months ago I wrote a short paper (by request) for the Richmond (Va.) Academy of Medicine, embodying known facts about "Naso-Pharyngeal Catarrh and its Treatment," viewed from the standpoint of my own experience, in order to call the attention of the local medical profession to the great prevalence of this trouble. Richmond, particularly, has fully its share, because of the quantity of irritating dust constantly floating in its atmosphere, and this dust I claimed to be one of the most active and prolific causes of naso-pharyngeal irritation. This, added to the fact that our climate is subject to very sudden and startling changes of temperature, with great dampness and moisture in winter, made a very good nursery for naso-pharyngeal catarrh.

But in that paper—a very imperfect one from want of time and space—I merely referred to the influence of catarrh and

* A paper read before the Medical Society of Virginia, September 9, 1884.

its accompanying hypertrophies on the sense of hearing. I wish now, however, to bring to your notice, more particularly, this influence and the importance of attention to the nose and naso-pharynx in cases of defective hearing. Four or five years ago I read before this Society a short paper on "Catarrhal Deafness," with the same object, but it differed considerably from the present pages.

In naso-pharyngeal catarrh the deafness which so frequently accompanies it may be due to any one of four causes:

First. To extension of the inflammatory process along the mucous lining of the Eustachian tube, or catarrh of the tube and tympanum.

Second. To direct obstruction of the mouth of the tube by hypertrophic mucous tissue.

Third. To interference with the normal ventilation of the tube by nasal stenosis.

Fourth. To loss of normal action of the palato-tubal muscles—the so-called "paretic deafness."

(1st.) In "catarrh of the tube and tympanum" the mucous lining of the tube and drum participates in the chronic inflammation, becomes thickened, the calibre of the tube is narrowed, and hearing is impaired by loss of motion in the drumhead and ossicles, resulting both from rarefaction of the air in the tympanum and the inflammatory changes. Such cases, if seen before radical changes (as, *e. g.*, stiffening of the articulations of the ossicles, bands of adhesion in the tympanum, etc.,) have taken place, can have the hearing restored by treatment of the naso-pharyngeal disease and systematic inflation of the drum.

(2d.) Where we have direct obstruction of the mouth of the tube, it may be due to hypertrophy of the pharyngeal tonsil, or to posterior hypertrophy of the erectile tissues over the lower turbinated bones, or to post-nasal vegetations (so-called adenomatous growths), particularly those on the posterior wall of the pharynx, with hyperplasia of the mucous folds. I have seen these latter cases in children, where the deafness had persisted for years, with occasional improvement in warm weather, have the hearing almost perfectly restored by a removal of the obstructions, and a short course

of treatment of the tubal and tympanal complication. Now, although my experience with a large number of cases, since my attention was first called to the existence of these growths, bears out my assertion of deafness being a frequent result of vegetations in the upper pharynx, with the authority of Mackenzie, Woakes, Meyer, Voss, and others to support it, there are some who hold a different opinion. Dr. Beverley Robinson, of New York, read a paper on this subject at the recent meeting of the American Laryngological Association; and, although I have not seen his paper, the journal reports of its discussion show that his experience does not agree with mine in the frequent production of deafness from this cause. It may be that he does not make a routine practice of testing the hearing of all his cases that have adenoid growths, or hypertrophy of the pharyngeal tonsil, and he may therefore frequently overlook defective hearing when it exists. I have often found this effect by tests when the patients made no complaint of it, and did not seem aware of any defect in their hearing.

(3d.) Interference with tube ventilation by nasal stenosis causes deafness by obstructing nasal respiration, cutting off the normal current of air along the inferior nasal meatus, and thus preventing the automatic capillary attraction of the Eustachian tubes upon the air current. Nasal stenosis, partial or complete, may be due to hypertrophy of the erectile tissues over the turbinated bones, either anteriorly or posteriorly; to polypi; to post nasal vegetations; to hypertrophy of the pharyngeal tonsil; to growths and deviations of the septum; to posterior thickening of the septum; to naso-pharyngeal tumors; to general hypertrophy of the nasal mucous membrane; and to rhinoliths.

(4th.) The last form of deafness from "paresis of the palato-tubal muscles" was first described by Weber-Liel, my former preceptor in Berlin, under the name of "progressive deafness," and he claimed it to be of central, reflex, or vasomotor origin. This valuable publication did not meet with the reception it deserved. Subsequently we are indebted to Woakes for considerable labor in this same direction. In 1872, I wrote an article, under the heading of "Tenotomy of

the Tensor Tympani Muscle," for the *Baltimore Medical Journal*, which was, as far as I can learn, the first publication in this country on the subject—Weber-Liel claiming that, on account of the deficient power of the tubal muscles the unopposed action of the tensor tympani acted deleteriously by drawing in the drumhead and impacting the stapes in the oval window, thus producing greater deafness, tinnitus and giddiness. Ultimately this resulted in its permanent contraction, with ankylosis of the chain of ossicles, and absolute deafness. Hence its tenotomy before such permanent contraction took place was of great importance. The congestion and dilatation of the blood-vessels of the naso-pharynx, which often precede and always accompany catarrh, if it extends to the nutrient vessels in the sheaths of the motor nerves of the palato-tubal muscles, will necessarily, by the pressure of these vessels on the nerves, enfeeble their motor-power and cause deficient action of these muscles. This vaso-motor influence is probably the explanation of the simplest forms of paretic deafness.

In the slighter forms, this deafness is curable by early attention to the naso-pharyngeal trouble, faradization of the tubal muscle, and inflation of the drum. In the more pronounced forms it is very intractable, and in the majority of cases absolutely incurable, going on to profound deafness in spite of treatment.

Here allow me to say that I do not wish to be understood as stating that all cases of nasal and naso-pharyngeal troubles are accompanied by deafness; but I do say that all cases of middle ear disease, whether acute or chronic, suppurative or non suppurative, are accompanied more or less by naso-pharyngeal changes; and I may also add that every case of nasal obstruction resulting in "mouth-breathing," and all cases of obstruction of the *lower nasal meatus*, even where the air-current can still pass through the upper passages, will, sooner or later, become more or less deaf if the obstruction is allowed to remain.

From the foregoing remarks, you can see the importance of a most minute examination of the nose and naso-pharynx when a patient complains of defective hearing; *vice versa*, the

importance of testing the hearing, especially of children, when there is any interference with free nasal respiration.

To examine the nose and naso-pharynx necessarily requires a perfect knowledge of the anatomy and relations of the parts on the one hand, and a familiarity with the post-nasal mirror and its rhinoscopic pictures on the other. Merely opening the mouth and depressing the tongue will rarely tell us anything unless we meet with hypertrophied tonsils, or large pharyngeal granulations and redundancy of the pharyngeal mucous membrane. If we find one or all of these, and have defective nasal respiration, we may be sure we have also important pathological changes beyond the reach of our unaided vision.

Anterior hypertrophy of the erectile tissue over the turbinated bones, deflections of the septum, outgrowths from the cartilaginous portion of the septum, and nasal polypi can be usually diagnosed by direct inspection of the anterior nares with a nasal dilator and a good light.

But growths from the posterior portion of the septum, thickening of the mucosa on either side of the vomer, hypertrophy of the posterior ends of the turbinated tissues, hypertrophy of the pharyngeal tonsil, and lymphoid vegetations of the naso-pharynx are only to be diagnosed by the post-nasal mirror. Posterior rhinoscopy is not of much service in little children, and here the "tactus eruditus" of the educated finger comes into play. By putting one arm around the child's neck, with the fingers on the cheek, so as to prevent its biting the examining finger, by pressing the soft tissues between the teeth at each attempt to bite, we can pass the finger up behind the uvula and explore the post-nasal cavity.

Vegetations feel like a bunch of worms; hypertrophy is firm and smooth. In larger children and adults, when I have any difficulty in getting a post-nasal view, I pass along the lower nasal meatus into the pharynx the smallest-sized flexible bougie, with a small wire in it to render it firm, and draw it out of the mouth, in the same way that Bellocq's canula is used. I then withdraw the wire and tie the two ends of the bougie together over the upper lip, thus getting a good view of the naso-pharynx by this forward traction on

the soft palate. I have been using this method for a number of years, and have never yet encountered a case of stenosis so great that I could not pass this little bougie.

The rhinoscopic appearances are unmistakable. In the normal image, the posterior wall and vault of the pharynx, smooth and free from irregularities; on either side the cartilaginous projections of the Eustachian tubes and their orifices, with the depressions behind them (*fossæ* of Rosenmüller); the sharply-defined, clean cut, oval openings of the posterior nares, separated by the septum, with the projections from without inwards of the turbinated bones—these make up a picture that, once clearly seen, is easily remembered. Any deviation from this is an abnormality requiring attention.

Just at the vault of the pharynx, behind the upper end of the septum, we may see a smooth lump projecting downwards—sometimes rounded or oval, sometimes pyramidal. This is the pharyngeal or *Luschka's tonsil* in a hypertrophied state; for, like the faucial tonsils, whenever it is at all noticeable, it is more or less hypertrophied. If you will recall your experiences of throat examinations, you will probably agree with me in saying that in a healthy throat the faucial tonsils are no more to be seen than if they had no existence, and my experience teaches me the same thing about the third tonsil. When hypertrophied, as with the faucial tonsils, it may be *dense and firm*, resembling a fibroid growth, either single or lobulated; or *soft*, forming a reddish granular mass, the so-called adenomatous tissue, which hangs down, hiding the sharp upper contour of the post-nasal openings, and sometimes covering the Eustachian tube orifices.

Again, the upper oval may be sharply defined; and lower down, projecting out from their lower segment towards the Eustachian tube orifices, we may see what looks like a mulberry, large or small, as the case may be, or, sometimes like a smooth, firm tumor. This is the *hypertrophy of the inferior turbinated tissue*.

Again, we may find the septum puffed out on either side, giving it a thickened appearance, due to hypertrophy of the muco-periosteum over the vomer; or, the post-nasal opening

may be occluded by a smooth, firm growth, springing from the septum—a *fibroid tumor*; but this is rarely met with.

More rarely still, we may find the naso-pharyngeal space partially or entirely filled with a growth springing from the muco-periosteum of its roof, and entirely occluding one or both post-nasal openings, and pressing on the Eustachian tube orifices.

Sometimes several of these pathological conditions will be present in the same case. All of them must be done away with to restore normal nasal respiration and prevent or diminish existing deafness.

Nasal polypi, although producing nasal stenosis, do not act so deleteriously upon the hearing as the above changes, because they usually spring from the upper or middle meatus, and what breathing room remains is in the lower and most important channel, but I have had patients with polypi to complain of occasional ear-ache. It is difficult to fix any certain causation for these growths and hypertrophies in the nose and naso-pharynx, though they occur during and possibly as a result of the changes that take place in the mucous membrane and its annexa in chronic naso-pharyngeal catarrh. The early occurrence and history of adenoid tissue points to heredity as a factor in its production, and it frequently results from the exanthematous diseases. I have quite a number of cases on my record-book of "suppurative aural catarrh" resulting from scarlet fever, which showed the complication of adenoid vegetations in the naso-pharynx, and I have observed that the treatment of the local ear disease is more rapidly and favorably efficacious after the removal or destruction of this tissue. In fact, I consider the treatment of any naso-pharyngeal trouble quite as important in suppurative as in non-suppurative middle ear disease.

The treatment of these growths and hypertrophies means their extirpation. My main dependence in such treatment is the *galvano-cautery*, for there is no case to which it is not applicable—a remark which does not so readily apply to the knife or cold snare, which I sometimes make use of.

Anterior turbinated hypertrophies, I destroy by removal with Jarvis' snare, or, better, by burning longitudinal furrows in

them with a galvano-cautery knife. In the absence of these, I have found glacial acetic acid a useful local application in shrinking them. When quite soft, I have known glycerole of tannin sufficient for the purpose. I have also seen them subside spontaneously where they existed in connection with posterior hypertrophies or adenoid tissue, when the latter were removed.

In *posterior turbinated hypertrophies*, I usually apply the galvano-cautery or Jarvis' snare. The latter instrument I have found more useful here than in anterior hypertrophies, because it does not give the same amount of discomfort as when used to remove the latter.

Deflections of the septum, if only slight, should be let alone; but if sufficient to cause stenosis, any accompanying hypertrophies should be removed, the deflected portion perforated with a punch or button-hole forceps, originally designed by the late Dr. Bolton, of this city, (the original forceps being now in the possession of Dr. Brock, of Richmond,) and subsequently modified by Dr. Steele, and then forced back into proper position by plugs or by laminaria flat tents. These I have found very useful for dilating purposes in the nostrils, frequently an apparently marked hypertrophy disappearing under the influence of the pressure alone.

Outgrowths from the septum can be cut off by a bistoury or snare, or shrunken by the galvano-cautery. Caustic applications are of no service. I removed, a short time ago, a fibroid as large as a hickory nut, springing from the septum, and the deafness in the case was evidently caused by the resulting nasal stenosis. I have appended the case to this paper. In another case, also accompanied by chronic adhesive processes in the tympanum, a cartilaginous projection from the septum had, by its pressure on the turbinated structures, set up ulceration. I cut off the projection with a bistoury and re-established nasal respiration with the *laminaria* dilators, when very marked improvement followed the aural treatment, which up to that time had only negative or transient results.

Adenoid or lymphoid vegetations, I always remove with the cutting forceps as far as possible, and then burn with the gal-

vano-cautery or with chromic acid. Although these vegetations usually appear in childhood and disappear about adolescence, there are exceptions. I have two patients under treatment at present, in one of whom the trouble *did not appear* until he was twenty-one or twenty-two years of age; and in the other, a young lawyer of Richmond, who has suffered from nasal stenosis more or less all his life, and although nearly thirty years old, I discovered post-nasal vegetations to be the cause of his trouble. Their removal with forceps and cautery is resulting in a very rapid recovery. But even if it were true that they always disappeared about adolescence, the fact that their presence may interfere with ventilation of the drum, or may keep up the catarrhal condition that, by extension to the drum, will produce "deafness," is sufficient ground to insist on their early extirpation, because the deafness may in time become incurable from the radical changes that would take place in the tube, drum, and drum-head.

In all post-nasal operations, except in small children, I tie up the palate, as above suggested, so as to see as much as possible what I am doing. We cannot watch the cutting forceps when applied, but we can see very well *where* to apply them. In using the snare, however, or galvano-cautery knives or points, I can see the instrument the whole time; and the same may be said of applying *chromic acid*, which I generally use to the stumps of any growth after operation.

No other caustic I have ever used has given me such entire satisfaction as *chromic acid*, because it has a decidedly caustic effect on the parts, does not spread when properly applied, and is almost free from pain. If there is any marked pain, it is instantly relieved by a warm-water douche or application. That, when improperly used it may produce symptoms of poisoning; or, if swallowed, will cause irritation of the stomach and vomiting; or, because workers in bichromate of potash sometimes have ulceration of the nasal mucous membrane and perforation of the septum, are no objections to its proper and judicious use. Poisoning from its use is easily prevented by carefully touching the parts with warm water as long as the water becomes tinged. A simple warning to the patient not to swallow during the application is

sufficient to prevent its entrance into the stomach; and as to the ulceration and perforation of the septum, we have the same results among workers in arsenic and in the manufacture of feathers and mirrors from the use of bichloride of mercury. In fact, anything that causes ulceration of the mucous membrane over the septum will produce a perforation, because the cartilage derives its nutriment from its mucous covering; but the perforation is limited in extent and no deformity results. If such workmen would wear cotton or wool pellets in the nostrils, there would be no such result from their work. All persons working where there is irritating dust or fumes should wear such pellets as a prophylaxis against catarrh and its complications.*

The treatment of the deafness resulting from these various causes should be conducted on ordinary otological principles—cleansing of the naso-pharynx by antiseptic sprays, with appropriate applications to combat the catarrhal condition; inflation of the drum cavity by Politzer's bag or by the catheter; internal medication, according to the accompanying symptoms and constitutional affections; regulation of the digestive and uterine functions; and sometimes change of scene and release from work and mental worry. But it can be readily perceived that without first relieving the nasal obstruction by operative interference, we can not apply these principles of treatment. We can not apply cleansing sprays, nor use Politzer's bag, with any satisfaction, and frequently we cannot even pass the catheter.

The cleansing sprays I use are composed of "*Listerine*," made by Lambert & Co., of St. Louis, Mo., diluted with an aqueous solution of bicarbonate of soda—one part to six. I consider Listerine a very valuable agent, because of its antiseptic and stimulating influence upon the mucous membrane. "Chloral-thymol," made by Mr. Blair, a chemist of Richmond, diluted in the same way, is also valuable, and the same may be said of carbolic acid, which I usually employ in the form of "Dobell's Solution." The two former are

*I have also been using chromic acid as an application to papillomatous growths in the larynx for several years. In enlarged tonsils, however, I have tried it to no purpose.

pleasant applications, and both are undoubted germ destroyers—a fact of some importance in the selection of cleansing applications in catarrh. In some cases I spray the parts with a mixture of fluid Cosmoline and oil of eucalytus.

After a thorough cleansing of the naso-pharynx, I make use of Politzer's bag in both suppurative and non-suppurative ear trouble;—in the former to drive out the secretion from the drum cavity into the external meatus, when it can be readily removed, and the ear packed with boracic acid powder; in the latter, to prevent or break up intra-tympanic adhesions. I use the compressed air apparatus to produce more forcible inflation when the ordinary pressure from a Politzer bag is not sufficient to affect the adhesions.

In some cases, especially where intra-tympanic secretion can be diagnosed with certainty, or even when the symptoms and appearances lead me rationally to such a conclusion, I perform paracentesis of the drum-head and wash out the drum cavity. In more advanced cases, when no change in the hearing or the subjective symptoms results from the naso-aural treatment, if there is distressing tinnitus and giddiness, I have resorted to "tenotomy of the tensor tympani," but with little expectation of improving hearing. I only do it as a last chance when all other means fail me to relieve the noises or giddiness.

The following cases are added in exemplification of the facts stated in this paper:

CASE 1. *Fibroid of Septum Completely occluding Left Nostril, with accompanying Left-sided Deafness.*—A colored woman about fifty years of age came to the Eye and Ear Infirmary November, 1883, complaining of difficulty of breathing through the left nostril, with noises in the head and deafness in the left ear. The nostril was perfectly occluded by a smooth ovoid red mass, firm and resistant to the touch; the post-nasal mirror showed the mass just within the post-nasal opening, extending outward from the septum and pressing on the anterior lip of the Eustachian tube. After considerable difficulty, I succeeded in passing a wire around it, and by careful traction with a Jarvis instrument I succeeded in cutting through it. I was obliged, however, to remove the tumor with a hook, as it fitted so tightly in the nostril. It was as large as a hickory-nut, and was attached

by a broad base to the back part of the septum. Microscopic examination showed it to be composed of dense fibrous tissue. Cauterization of the place of attachment with chromic acid, and treatment of the aural trouble, resulted in a perfect cure.

CASE 2. *Aural Disturbance, Eye Trouble and Anomalies of Sensation in the Cheek due to Rhinoliths.*—Mrs. F——, forty-eight years of age, came to me some months ago, complaining of general discomfort on the right side of the face and head. She had for a long time suffered with alternate numbness and neuralgia of the right cheek, with occasional tinnitus aurium and slight defect of hearing, and with disturbance of vision and discomfort in the right eye. She had recently consulted an oculist in Baltimore, who prescribed glasses and some internal treatment. She could see better, but still had more or less discomfort in the eye. In my routine examination of the nose, I noticed a considerable stenosis of the right nostril, due to what seemed to be a swelling on the floor of the nostril, and to a projection or outgrowth from the cartilaginous septum, just above the swelling, the two abnormalities completely blocking the lower meatus. I first cut down through the mucous membrane covering the swelling on the floor, and my knife grated on a hard body. . With probe and forceps I succeeded in enucleating what looked more like a piece of slag from an iron-furnace than anything else, weighing 14 grs., and which I took to be a rhinolith. In like manner I cut in and removed the projection from the septum, which proved to be a similar body, weighing 5 grs. Both seemed to be encysted or sacculated, as it were, with a growth of healthy-looking tissue over them. Their removal, followed by a two-weeks' after-treatment, resulted in entire relief of all the symptoms, which have not appeared to this date.

CASE 3. *Naso-pharyngeal Tumor causing Complete Nasal Stenosis on Both Sides and Chronic Suppurative Aural Catarrh.* T. F——, twenty-one years of age, came to see me last June, to be treated for obstruction of the nose, associated with suppurative aural catarrh. The nasal obstruction had existed for about eight years, gradually growing worse. After nasal stenosis was established, he had frequent attacks of slight ear-ache and deafness, which developed into a chronic discharge from both ears. Anterior rhinoscopy showed both nostrils to be occluded by a firm red mass, which seemed to project into the nasal passages from the post-nasal space. On the right side examination with a probe could be made,

but any such attempt in the left nostril was followed by profuse and alarming hæmorrhage very difficult to arrest. Posterior rhinoscopy revealed the whole post-nasal space above the level of the soft palate to be completely filled by a smooth reddish mass, somewhat larger on the left side, and tapering off to the right, where the posterior part of the vault could be seen. After several ineffectual attempts, the wire slipping off each time I applied it, I succeeded in getting Jarvis' snare around the mass through the right nostril, and by keeping it close up to the septum, succeeded in cutting off a piece about the size of a hazel-nut, which re-established breathing through the right nostril. I then discovered the vomer to be driven considerably out of the median line by pressure from the left, thus narrowing the right post-nasal opening. I discovered that what I had removed was merely a projection, lapping around the posterior aspect of the vomer, from a tumor growing from the left side of the nasopharyngeal vault, the major part of which was tightly wedged in that side of the cavity, and passing into the left nostril. Every attempt at putting a snare around it was unsuccessful, and followed by dangerous hæmorrhage. So I tried to shrink it with the galvano-cautery by burning grooves in it, both anteriorly and posteriorly. After several applications this was succesful to such an extent as to enable me to pass the wire snare of the galvano-cautery around it and cut it through close up to the vault, with the wire at a red heat. I think he may be saved from a return of the growth by an occasional application of the cautery to the seat of the tumor until complete healing has taken place. But the noticeable feature of his case, in exemplification of the statements in this paper, was that his deafness and ear trouble, which had formerly been intractable to treatment, disappeared rapidly after nasal breathing was re-established.

I could offer many other cases in point among those more commonly met with, but preferred to record the above three, as they are somewhat uncommon.

410 *E. Grace St., Richmond, Va.*

For Hour-Glass Contractions of the Uterus after Labor, there is no agent that relaxes the spasm more speedily than free inhalations of amyl nitrite on the part of the patient.

ART. II.—**Enlarged Tonsils—Their Cause, Course, and Treatment.** By FRANK WARNER, M. D., Columbus, Ohio.

The amount of disturbance which hypertrophied tonsils occasion to the constitution of the individual is usually very decided. This is not surprising, however, if we stop to reflect that the gland is subject to frequent attacks of quinsy; that a continuous interference with free nasal respiration takes place, and during the acute exacerbations the blood is often very imperfectly oxygenated; and that following a suppurative attack a continuous discharge may supervene for weeks.

Enlarged tonsils occur seldom, except in children and young adults. They are very rarely encountered for the first time in persons more than thirty years of age. The diseased tonsils occur usually in persons of debilitated type, either constitutional or the result of some severe acute illness in which the individual is left in an anæmic state.

Cohen* states that most cases occur as a result of struma, either associated with other manifestations of the dyscrasia or the hypertrophy constituting the sole expression of the taint.

MacKenzie,† while making a less sweeping statement of its cause, yet ascribes a large percentage to that producing factor. This author attributes the production of the disease in children, during the earlier months of existence, to various affections of infants, as eczema and impetigo of the face and scalp, purulent ophthalmia, and nasal discharges.

The disease frequently becomes developed about the period of puberty, and, as some authorities think, from a sympathetic relation existing between the genital organs and the glands.

The enlargement is sometimes the result of frequent attacks of quinsy, more especially when the constitution is in a depraved state.

It occurs more frequently in males than in females. But of 1,000 cases reported by MacKenzie,† 673 were males and 327 females. I produce his table:

**Diseases of the Throat and Nasal Passages*, p. 225.

†*Diseases of the Throat and Nose.*, Blackiston, 1880, p. 75.

AGE.—1 to 5.....	84	} Under 10.....	265
5 to 10.....	181		
From 10 to 20.....			382
" 20 to 30.....			219
" 30 to 40.....			103
" 40 to 50.....			27
" 50 to 60.....			3
" 60 to 70..			1

Enlarged tonsils frequently follow a severe attack of measles, scarlet fever, small pox (with throat complication), and occasionally follows diphtheria, but the last-named disease is seldom the producing factor. Syphilis, hereditary or acquired, sometimes antedates the morbid condition, and stands as a producing factor.

From whatever cause produced, hypertrophy of the glands usually occurs after a series of acute attacks of sore throat; but often they become enlarged without such a history.

The degree of enlargement varies in different cases. The tonsils may simply project beyond the anterior palatine folds, or they may become as large as walnuts, almost entirely filling up the pharyngeal space, and, approximating, may become adherent to each other.*

If the enlargement has existed for any time, the anterior pillars of the arch will likely be found adherent to the tonsils, though usually the adhesive bands are quite readily separated by means of a bent probe.

The whole of the enlarged gland cannot always be seen, as it may be concealed behind the anterior arch of the palate; but here its dimensions may be learned, either by lifting the tonsil from its bed, by pressing with the fingers behind the angle of the jaw, or by means of the rhinoscope and laryngoscope, the latter methods in many cases being found very satisfactory.

The morbid condition usually includes both glands, but frequently one is more enlarged than the other. I recently saw a case in which but one tonsil was enlarged, and on the opposite side was a troublesome follicular tonsillitis of a chronic character. One gland may be in a healthy state and of normal size, while the opposite one is enlarged.

*J. Solis Cohen, *Diseases of Throat and Nasal Passages*, 1879, p. 226.

The hypertrophied glands are usually in an inflamed condition, and the surrounding parts are generally involved in this state. The uvula, pharynx, nares, or larynx and bronchial tubes may be involved in a chronic inflammation, but they usually return to a natural state of health after the removal of the tonsils.

Unpleasant effects may not be experienced from a moderate degree of hypertrophy, except during an acute exacerbation. Where the enlargement is considerable, nasal respiration is continuously interfered with, and the voice is greatly modified in the quality. Under these circumstances there is a peculiar clang to the voice, and the tones become muffled and guttural. There is snoring during sleep, and a dryness of the throat produced by keeping the mouth open. There is very apt to be an eventual impairment of the health.

Hypertrophied tonsils are generally smooth and globular in their outline, but sometimes are rough and jagged, and present numerous mouths of the dilated laminae. Protruding from these little pockets may generally be seen whitish pellicles of inspissated secretion.

The condition of the surrounding parts is such as will soon interfere with smell and taste. The hearing very frequently becomes impaired.

In *early life*, where the enlargement is considerable, the interference with free respiration is such as to demand immediate attention. In *adults*, when an acute attack is superadded to the malady, suffocative attacks may come on which threaten to compromise respiration.

By far the most effective way of removing the diseased glands is by cutting away that portion lying beyond the pillars and arch of the fauces. Where, for any reason, the patient, if an adult, or the parents of a child, will not permit any cutting operation, some other measure must be employed. Where there is simply a slight enlargement, and this due more to the thickening of the mucous membrane than of the connective tissue, astringents may be found effective, more especially if the enlargement is of recent date. The daily insufflation of tannic acid, diluted one-half with bismuth, will be found as good as any of the astringents. Where

there is a real hypertrophy of the gland, and an escharotic is used, MacKenzie* loudly vaunts the London paste, which is composed of equal parts of caustic soda and unslacked lime, to which water is added, as required for use, until the mass is of the consistency of cream. A small-pointed glass rod or stick may be used to make the applications. The throat should be washed out thoroughly with water after each application, so as to remove any surplus of the caustic. Some care should be exercised, lest too much surface be covered with the caustic at one place, and a very violent inflammation might ensue. The application may be repeated once or twice a week on different parts of the surface of the tonsils. The result is a slough at each point of the application. If persevered in, the enlarged glands may be reduced in this way to the natural size, or until they cease to give farther trouble. The attainment of this result is both painful and tedious, but where patients will not permit the use of the knife, it is a very effectual way of removing hypertrophied tonsils.

The galvano-cautery may be used in the same way for the destruction of the diseased masses. Likewise, the Vienna paste has been found effectual. Dr. Cohen has succeeded in reducing a few tonsils of soft consistence and recent enlargement by electrolysis, requiring ten to twenty applications, though he does not speak very highly of this mode of procedure.

Chisolm* has made successful use of applications of a saturated solution of chloride of zinc to the follicles of the gland. His mode of applying the caustic is to take a fine wire, roughened at one end so as to hold a fiber of absorbent cotton twisted upon it. After dipping this into the saturated solution referred to, carry the cotton to the bottom of the crypt, keeping it there for several seconds. A few follicles may be cauterized at one sitting, which, after a short time, will cause a shrinkage of the hypertrophy.

**Diseases of Throat and Nose*, Blackiston, p. 82.

**American Practitioner*, Louisville, July, 1884, from *Virginia Medical Monthly*.

Bartholow* says that "hypertrophy of the tonsils can usually be cured by the injection of the tincture of iodine into their substance. To execute this little operation, a hypodermic syringe, with a sufficiently long needle, is necessary." An *écraseur* of twisted wire is occasionally used, though it is not applicable to all cases, but is better suited to those of very considerable hypertrophy. It is difficult to limit the action of the wire to the portion of tonsil which you desire to remove, and is apt to drag surrounding tissues within its grasp, which is undesirable to have done.

Many of the older surgeons prefer operating with a knife by lifting the tonsil from its bed and slicing off a piece; but where the tonsil is not too large and is free from calcareous concretions, some form of tonsillotome is preferable, as less likely to wound the carotid artery—an accident which has been known to take place on a very few occasions. Besides, the operation is rendered easier of execution and is divested of much dread which many patients have of its performance.

There is another class of cases, in addition to the very greatly hypertrophied tonsil, which will be found difficult to abscise by the tonsillotome as ordinarily used. I refer to those which are only slightly enlarged, and have broad, flat, and rugged or ulcerated bases, yet are subject to the same acute and annoying exacerbations as the more hypertrophied tonsils. As illustrating this class of cases, I quote a few lines from a report published by Dr. Carl Seiler,† in which he says: "On inspection of the fauces, we see the right tonsil of normal size but very ragged, while the left gland is enlarged and full of holes and fissures, which bleed readily when touched. * * * The tonsil in this case is too small and and too ragged to be ablated with the tonsillitome, and yet it must be removed in order to relieve the symptoms. Two methods may be pursued in these cases, which are by no means infrequent, viz.: destruction of the tonsillar tissue with caustics, such as Vienna paste, the mineral acids, or the galvano-cautery, or scraping the gland out of its capsule with a sharp uterine spoon."

* *Materia Medica and Therapeutics*, 2nd edition, p. 179.

† *Medical Bulletin*, Philadelphia, January 1, 1884.

A very practical way of operating in these cases is to bring to the aid of the tonsillitome a pair of long-toothed forceps. In operating, arrange the patient as ordinarily directed in the text-books. After applying the tonsillitome over the tonsil, have an assistant grasp the tonsil through the ring of the instrument by means of a pair of bullet or placental forceps, and while lifting the tonsil through the ring, the surgeon drives home the blade of the instrument, thus removing as much of the diseased gland as thought desirable. The accompanying pain and bleeding is inconsiderable if operated upon while the glands are in a quiescent state, and this is the only time when the operation should be attempted. The resulting cicatrization is sufficient to obliterate the offending gland and to relieve the patient of the annoying, painful, and occasionally dangerous attacks of quinsy.

ART. III.—Consumption—Its Contagiousness, Prevention, and Treatment. By C. HOWARD YOUNG, M. F. S. H. Membre de la Société Française d'Hygiène (Paris); Staff of *Journal d'Hygiène* (Paris); Author of *Americans and Their Civilization the Result of Climate*. Hartford, Conn.

The latest numbers of the *Journal d'Hygiène*, of Paris, reviews the most recent works on consumption—*The Living Nature of Contagion*, by Dr. Bouley, and *Tubercular Consumption*, by Prof. Germain Sée, physician at the largest hospital in Paris, the Hotel Dieu.

Villemin, in 1869, at Paris, proved that the above disease was contagious; before 1869, Van Swieten, Valsava, Morgagni had suspected and proclaimed it.

We have, to-day, the proven fact of the contagiousness of consumption, demonstrated by Dr. Chaneau, Toussaint, of France; and by Koch of Berlin, and Klebs of Strasbourg, and others of Germany. Dr. Colin, head of the French Veterinary School at Alford (near Paris), has proved that the virus of phthisis inoculated by the lancet, produces galloping consumption. It is, then, a violent virus.

Modes of Contagion.—(1) It is produced from person to person. The sputa dries and is carried by the wind, and so disseminates the bacilli of consumption; (2) By drinking milk from consumptive cows; (3) By eating meat of consumptive animals; (4) The disease germs of tuberculosis are probably carried around, to some extent, by flies,* as the cholera bacilli at Genoa and Naples were, according to Italian doctors; (5) By infected clothing and bedding. The writer, employed on the staff of a medical journal at Paris, translated into French a communication from a celebrated English doctor, who wrote about a man who had married three times, the wives dying of consumption. The mattress used was the one used by the first wife, who had inherited consumption. He escaped, being very robust. Consumption is often "inherited" simply because the heir has used old mattresses, woolen chairs, sofas, carpet, etc., containing disease germs handed down with the personal estate.

There are other ways of inoculation, but the above are probably the principal.

General Division of Consumption.—One-fifth of all deaths come from consumption. In all countries the proportion is about the same; one-fifth of the mortality at London is due to the above cause, and one-seventh at Naples. At Naples I heard the Italian proverb, oft quoted, "He who passes bare-foot over the sputa of a consumptive is lost." Woolen goods, mattresses, etc., are burnt at Naples after the death of a con-

*At present in Italy, at Genoa and Naples, the Italian medical men ascribe the spreading of the cholera, in a measure, to flies. A number of thousand of the bacilli of cholera could be easily carried in the fly-trunk (not to speak of his carpet-bag) or proboscis.

No doubt they are equally efficient in carrying the bacillus of consumption. Still they do good as scavengers or sanitary police—the only sanitary police many of our American cities have.

As an invalid, confined to bed, I have paid considerable microscopic attention to this sanitary pest known as the fly, and find he has his own little epidemics and troubles.

Several years ago, I noticed many flies were infected with tiny bright red parasites, visible to the naked eye. They are about one-half the size of an average pin-head, and bright vermillion in color. Seen under the naked eye, they resemble little round spots of red sealing-wax. The skin shines and resembles that of a tomato. It has six legs. I have one under my microscope which is infested with thirty of these parasites.

sumptive. In Algeria and North Africa generally, phthisis is generally rapid—galloping consumption.

Prevention.—There should be examiners in every town and village to condemn and seize diseased meat. I believe Paris has thirty-two meat inspectors, and Prussia 22,000! How many has New York?

Prevention from Danger per Sputa.—The German Government requires all consumptive soldiers to spit in cuspadores in which chloride of lime has been placed. Restaurants, cafés, and places of public resort, should by law have such disinfected cuspadores.

States and individuals should offer prizes for a specific. A philanthropist might offer prizes for a cure. Vanderbilt generously gave \$500,000 to the New York College of Physicians and Surgeons. Let him, or Jay Gould, offer the same amount for a specific for consumption. It will be the easiest way of laying up treasure where neither moth nor rust doth prevail.

Remedies.—Dr. Bouley, of France, sees a remedy in vaccination with attenuated tubercular matter. He awaits this discovery from Dr. Pasteur, the discoverer of the prevention of hydrophobia, anthrax, silk-worm disease, etc.

The Rational Treatment of Consumption.—The disease is to be treated by whatever will kill the bacillus, or consumptive microbes. At present Dr. Bouley seems to recommend the “sulfites alcaloris” (alkaline sulphites). This bacillus of consumption was found by Dr. Koch, the celebrated discoverer of the cholera germ.

The best practical work on consumption, up to this date, is *Traitement rationelle de la Phthisie Pulmonaire* (*Rational Treatment of Consumption*), by Dr. Prosper de Pietra Santa. The author is a specialist for lung diseases, was formerly Physician to Napoleon III, and is now editor of the *Paris Journal d'Hygiene*. He is the author of many standard medical works, one of which, *Les Climates du Midi de la France*, will interest consumptive readers. He is the first hygienist of France, just as Bock was of Germany, and Mantegazza is of Italy. Unfortunately, there is no English translation of his work on consumption.

From the standpoint of the germ theory, the best, most complete, and latest work is the before-mentioned one of Dr. Germain Sée, of the greatest hospital in Paris—the Hotel Dieu. As a medical student in Paris, I remember his bold, vigorous, original lectures to a circle of charmed students—future doctors. This work is published by Delahaye, of Paris, and it is to be hoped we may soon see an English translation.

Specifics.—Now that the cause of consumption has been found to be a living germ, we may hope that a specific may sooner or later be found. In a late number of the *Gartenlaube*, of Germany, which lies before me, I find a celebrated medical writer very hopeful on the subject of this specific. It may be that consumptives will find a specific in elecampane (helenine, or aunée—French). The celebrated Dr. De Korub, of France, claims that it destroys the germ of the tubercles. He inoculated rabbits with phthisis, and they died; others, inoculated in the same way, but treated with elecampane, recovered. Finally, he introduced elecampane in tubes containing the bacilli of consumption, and the germs died. Pills and syrup of elecampane (helenine d'essence d'aunée) have been used lately in Paris hospitals, and the medicine is spoken favorably of by the French Académie de Médecin—perhaps the most august medical assembly in the world. Eleven French medical journals speak well of the merits of this medicinal plant, which was much used and highly praised a couple of centuries ago. Personally, I ordered from Paris pills of the above plant, and have used slightly a decoction of the root with some good results. According to an old book (Gerades *Herbal*, 1638), which I found lately in the Watkinson Library, in Hartford, “Elecampane root, taken with honey made in an electuary, cleanseth the breath, ripeneth tough phlegm and maketh it easier to be spit forth, and prevaieth mightily against the cough and shortness of breath, comforteth the stomach and helpeth digestion.”

230 *Asylum street.*

ART. IV.—What Constitutes Diphtheritic Conjunctivitis—A Case illustrating the Value of Iodoform. By HERBERT HARRIS, M. D., Surgeon to Presbyterian Eye and Ear Hospital, etc. Baltimore, Md.

A. B., a child of ten months, was brought to me in November, 1884, with the left eye closed; the lids thick, hard, red and swollen, the upper projecting over the lower. At first glance, I thought I had to deal with a bad case of purulent ophthalmia, but there was no discharge. The child was feverish and restless. On gently separating the lids, I found the conjunctiva evenly and entirely covered with a dense creamy-white membrane. This membrane was firmly adherent and could not be detached, except in small pieces, when a bleeding surface would be left behind. The cornea was clear. No attempt was made to remove the membrane. The surface was gently wiped off with absorbent cotton, and then the whole freely dusted over with finely powdered iodoform. A borax solution was ordered to be used three times a day, and ten drops of tinctura ferri chloridi to be taken internally.

The following day, the fever and restlessness had disappeared, and the redness and swelling of the lids had greatly lessened. The same treatment was continued.

After three days, the mother reported that the eye had been open during the greater part of the morning. The membrane was still *in situ*, but much thinner and darker in color. The fifth day, the greater part of it was wiped away with some absorbent cotton on the end of a tooth-pick.

On account of very inclement weather, the child was not brought to me again until the eighth day, when it was carried in with the eyes wide open. There was still some redness, and some limited opacity was observed at the lower border of the cornea. This had doubtless existed before, but had escaped observation on account of the difficulty of making a thorough examination, and would seem to indicate that treatment had been instituted just in time to prevent corneal ulceration, followed by perforation, staphyloma, and loss of the eye.

A week later the case was dismissed as cured, having only a faint nebula at the lower margin of the cornea.

I have considered the above case of sufficient interest to be reported for several reasons, but chiefly on account of the favorable termination under the iodoform treatment.

Diphtheritic conjunctivitis is acknowledged by all to be a

rare and fatal malady, but there is a good deal of obscurity in the matter of accurate diagnosis.

What are we to call croupous or membranous conjunctivitis, and what diphtheritic? The formation of a false membrane on the mucous covering of the eye is not sufficient, for we have every variety of membrane, from the simple mucous shreds of catarrhal conjunctivitis to that found in the most fatal cases of diphtheria. Such are the cases where the skin about the eye looks red and angry, where the lids are dense, hard and whitish, where there is infiltration *into* the tissues of the lid as well as the conjunctiva, rather than an exudation *on the surface* of the latter—where, in short, we recognize at a glance the impossibility of saving the eye. These varieties I have seen as nicely graded and so running into each other that it is quite impossible to say, for example, where catarrhal ends and the membranous begins, or in just what respect the croupous differs from the diphtheritic. There seems to be a tendency to call only the worst cases diphtheritic, and the milder ones, such as recover under judicious treatment, membranous.

The modern pathologists tell us there ought to be no confusion in this matter—that diphtheria is a *specific disease*, and that when we have this specific disease with its peculiar local manifestation on the conjunctiva, then, and then only, have we diphtheritic conjunctivitis. This seems very simple, but it really opens up the whole question of diphtheria, as to just what are its pathonomonic signs and symptoms.

There is no doubt that there *are* very mild cases of true diphtheria—cases where the constitutional disturbance is very slight and the pharyngeal lesions confined to a few patches of whitish deposit. There is no doubt that in a whole family so affected, it frequently happens that one or two members develop graver symptoms, and die of true diphtheria. Are we, then, to call only the fatal cases diphtheria, and the other sore throat with pharyngeal deposit?

For myself, I accept as diphtheritic those cases where the membrane covers the conjunctiva, is firmly and closely adherent, can only be removed by tearing it forcibly from the sub-conjunctival connective tissue, leaving a bleeding surface

behind, and this accompanied by marked fever and depression—in other words, constitutional symptoms of diphtheria, with the formation of a false membrane on the conjunctiva, which I can not distinguish from a true diphtheritic membrane.

246 *Madison Ave.*

Clinical Reports.

Two Cases of Amenorrhœa. By D. A. RICHARDSON, M. D., Osceola, Ark.

Cases of amenorrhœa are of such frequent occurrence as not to excite much comment, but the two cases I am about to report were of such interest to me as types that I give them, hoping that they may be of interest to others, and perhaps add a little to the mass of fact which forms the basis of study of this form of disease. Both cases were typical, both fatal, and both practically uninterfered with.

One case I first saw on January 7, 1884, and the other on April 15th of the same year; but as the latter case was first fatal, I give it as Case I.

CASE I. *Suppressio Mensium*.—I was called April 15, 1884, to see Sally —, servant, white, age 19. She was suffering from intense pains in her back and limbs and left side of the head, with severe cramping pains throughout the whole body. On inquiring I found that her menses had not been established until the age of 17, and had been very irregular in their recurrence until within four or five months of this attack. During these few months she had menstruated regularly and easily until through carelessness she “caught cold,” and on May 12th “had a chill,” followed by fever and slight pains, growing more severe until the time of my call, at 11 A. M., on the 15th.

I found her suffering intensely at times, with intervals of apparent rest. Her pulse was not rapid, but intermitted frequently, and her respiration was gasping and labored. An examination showed the pelvis flattened in front; the arch of the pubis was quite low; her vagina of medium diameter but short; the uterus was enlarged and hard, and the

os appeared as a mere depression in the extremity of the cervix, which was very small and sharp.

As she had all the symptoms of cerebral hæmorrhage and rapidly approaching dissolution, I gave nothing but sedatives. Had I seen her before symptoms of cerebral hæmorrhage had developed, I would have dilated the os to allow the discharge of the retained fluids, but it was too late and she sank rapidly, dying at 11 P. M., just twelve hours after my first call.

CASE II. *Emansio Mensium* —January 7, 1884, I was called in consultation by Dr. H. C. Dunavant to see N. W., white, æt. 15. We found her suffering with severe rheumatoid pains and with cramps in the muscles of her neck, arms and legs. She had been suffering since November 27, 1883. Her pulse varied from 110 to 120, and temperature from 101° to 102°. Exacerbations of pains occurred every four weeks, and were accompanied by rose colored elevations on the body and extremities. We found the vagina small, hardly admitting the use of small anal speculum. The cervix was very small and the uterus was almost, if not quite, rudimentary. The ovaries also were swollen and tender on pressure, and we agreed that all of this patient's trouble was caused by retention of the menstrual fluid. We advised extirpation of the ovaries, but as this was refused, we tried dilatation of the os, followed by local and general galvanization, which was continued for about ten days, at which time (January 17th) she was transferred to the care of an "Eclectic," who promised to have her up in eight days, and proceeded to treat her for "*kidney disease*" with "Pierce's Favorite prescription" and "Golden Medical Discovery." She continued to grow worse, and in April Dr. Steele, of Caruthersville, Mo., was in town and was called to see her. He told us (Dr. Dunavant and myself) that the trouble was caused by rudimentary and imperforate uterus, and that the knife was the only hope.

During the summer Dr. Prewitt was called and treated her without success. (August 14) Dr. Dunavant was called to prescribe for nausea, from which she suffered considerably. She continued having periodic paroxysms of cramping and eruptions till September 23, 1884, when she died.

Before death she had a paroxysm beginning with pains in the lower part of her abdomen, which rapidly increased and extended to the extremities and neck. Small hæmorrhagic points appeared in quick succession, the subcutaneous tissues becoming filled with dark, effused blood, and she, sinking rapidly, died early in the afternoon.

No autopsy was allowed, but I am perfectly satisfied that we would have found the same condition as was diagnosed by examination while living. I am also satisfied that in this case the knife was the only possible cure.

In Case II nature made a strong but unsuccessful effort to establish a habit of vicarious menstruation.

These cases may be of value as showing the course of such affections when practically left to themselves and allowed to pursue their natural course.

Correspondence.

Carbolic Acid Spray in Ovariectomy, Etc.

Mr. Editor,—The following is an extract from a recent work by Dr. Emmet (*Emmet's Principles and Practice of Gynecology*, p. 715): "In this country I do not know of any prominent operators who employ the carbolic acid spray." This statement implies that the writer is not persuaded of the value of spray in ovariectomy. My own experience has led me to an opposite opinion. Indeed, I should not like to do a laparotomy for any purpose without antiseptic spray. I have been led to this conclusion by the results of one hundred and eighty three cases of removal of cystic ovaries, of which I have lost only twenty-one; but more especially by the result of the last one hundred of these cases, only ten of which were fatal, while thirty-eight were consecutively successful. I feel that to omit the antiseptic spray would be to deprive the patient of one of the ready and efficient elements of success. As I can hardly hope for much better results than those I have cited, and being quite content to let well enough alone, I shall hesitate before disturbing my present plan of operation by giving up a detail to which I attach much importance. Very respectfully,

Your obedient servant, JOHN HOMANS, M. D.

161 Beacon street, Boston, Mass.

Proceedings of Societies.

CHICAGO MEDICAL SOCIETY—Organized April, 1850.

[Reported by LISTON H. MONTGOMERY, M. D., Chicago, Ill.]

Dr. D. A. K. Steele, President. Regular stated meeting, February 16, 1885.

Malignant Disease of the Thyroid Gland.—Dr. C. E. Webster read a report of a case of this sort. The patient was a woman about sixty years of age. Her general health was quite good. The enlargement in her neck was first noticed about one year before the first consultation. It commenced in one lobe of the thyroid and rapidly extended to the adjacent glands and tissues of the neck. Rubbing with liniments appeared to relieve this swelling, but it never entirely disappeared, and at the time of his first seeing the patient the gland began to enlarge. Swallowing was difficult. The voice was husky, although respiration was not impeded. The thyroid gland, larynx, trachea, and neighboring cervical glands, formed an irregular, doughy mass. In the diagnosis of this case there were two possibilities to be considered—tertiary syphilis and cancer of the thyroid gland. The history of the progression of the disease from an enlargement of the thyroid, and the fact that such an enlargement of this gland in people past middle life is almost invariably malignant, rendered the diagnosis easy. A short course of specific treatment, and an observation of the steady progress of the disease, confirmed the early diagnosis. The patient passed on to a gradual exacerbation of her difficulty, and recently died of exhaustion.

The microscopic appearance of this growth is sometimes peculiar, hardly differing from that of a benign tumor of the same organ; so that oftentimes in these cases a positive diagnosis is difficult from a microscopic examination alone. The reader then recited an instance in the service of the Massachusetts General Hospital, where such a doubtful tumor proved itself to be malignant, by its recurrence after excision. In that case the alveoli were lined with cuboid cells and filled with a homogeneous substance.

Dr. F. Carey inquired, by referring to the case that occurred at the Massachusetts General Hospital, if the alveoli were filled with a homogeneous substance, where, then, were the cells situated?

Dr. E. J. Doering asked, if removal of the gland by surgi-

cal procedure would have been justifiable in the author's case?

Dr. L. H. Montgomery inquired as to the dimensions of the growth of the tumor situated in the thyroid; also, did it appear to extend uniformly in all directions; and if the author had any idea as to the functions of the thyroid? Might not the thyroid be located for the purpose of protecting the trachea, or act as a sort of reservoir analogous to that of the spleen?

Dr. Webster replied, in substance, as follows: That the lumina of the alveoli were filled with a homogeneous substance, and the cells were arranged peripherically in the hospital case that he made mention of. Regarding the case he presented in his report, at the time of the first consultation the disease had progressed to such a stage that it would have been impossible to perform an operation successfully, as the deep tissues of the neck, including the œsophagus, were involved in the growth. The time for an operation, therefore, would have been at the time the growth was first noticed. The size of the growth on the thyroid was as large as half of a hen's egg, and it extended in several directions, so that the tissues of the neck felt like a doughy mass, although the sub-maxillary glands were not involved in it. Regarding the functions of the thyroid gland, he had no theory to offer. It is a ductless gland, the same as some others throughout the human system.

Tænia Solium in a Child Two Years of Age.—Dr. C. G. Davis read a report of a case of tænia solium occurring in a child two years old, and exhibited about four inches of the worm, including the head. He was first called to see the child December 10th last, when it had not entirely recovered from an attack of entero-colitis, which it suffered from throughout the entire summer and autumnal months. The child still had occasionally the usual symptoms of cholera-infantum, such as vomiting, indigestion, diarrhœal discharges, etc. Immediately the child was given a number of simple remedies, with raw beef. This treatment seemed to act properly. In a little while portions of taenia began to appear in the discharges. The child was then given a half-teaspoonful of Tanret's preparation, "Pelletierine," and followed in an hour with twenty drops of tincture of jalap and a tablespoonful of castor oil. This was followed by the expulsion of three or four yards of the worm, but the head was not found. The child was then carefully nursed and its general health looked after, when segments of the worm again ap-

peared in the evacuations. A double dose of the quantity of "Pelletierine," tincture of jalap, and castor oil, as above stated, was then administered, when seven or eight feet more of the worm was dislodged, including the head, which was then exhibited to the Society.

Dr. Doering stated that he had treated three children having tænia—one of which was nine years old, another four years of age, and a baby that was but six months old. The last case had been fed on raw beef whilst sick with enterocolitis. He was surprised at Dr. Davis's success with the remedies he had used, given in such small quantities, as he himself had practiced the same method of treatment, and with larger doses of "Pelletierine," with but partial success only.

Hygroma Linguae—Under Somewhat Serious Disadvantages.—

Dr. Joseph Zeisler reported a congenital case of this rare disease, or bearing this title, which is at present under his care. Said he: It is a strange disease of the tongue that has occurred to Emma, who is now about nine years of age. She has suffered from the trouble since her birth. The child is well nourished, but her complexion is pale. Her face is symmetrical to a considerable degree, and its formation is very incommensurable in a number of respects. The right half of her face is much more developed in its muscular and osseous formation than the opposite side. No swollen submaxillary or cervical glands are present. Her tongue was described as having the following appearance: It is much thickened, the surface appears to consist of small vesicles or cysts, varying in size from that of a pin-head to that of a pea, lying by the side of each other, in the form of mosaic pieces of workmanship, or in a tessellated shape. These cysts seem to contain a colloid mass, and this condition affects the entire visible portion of the tongue, so that no intact mucous membrane can be seen. Over the middle of the tongue there extends a kind of cock's comb or carunculated excrescence or cristate in form, of the same appearance, but presenting a more papillary or warty resemblance. These crists are also found on the mucous membrane of the right cheek, near the angle of the mouth. In handling or touching the tongue the surface imparts a sensation, as if it consisted of oiled globules or boiled sago. The movements of the organ, as well as speech, are not impeded; nor is the sense of taste in the least impaired. There are no spontaneous pains proceeding from it, and pain arises only when strong compression is made upon her tongue, or, as the child says, when acid substances

are taken. Relatives of the child report that its tongue was formerly much larger, although it sometimes now appears to become œdematous and then grow smaller again. Her parents and her five brothers and sisters have always enjoyed good health, and are in a healthy condition at the present time.

The writer regards this disease, from a pathological standpoint, as a colloid degeneration of the mucous membrane of the tongue, but he could not classify it clinically, having never seen a similar case previously. A microscopical examination was not permitted to be made of any of the cysts or their contents. Galvano-puncture was suggested as a remedy, which was also declined.

Dr. E. Andrews, Dr. C. T. Parkes, Dr. J. N. Hyde, and several other well known physicians, had seen this case, but could add nothing further of interest relative to it, nor to the treatment, as they had never seen a similar case.

Dr. Doering had seen this patient two years ago. The tongue then presented a "sago pudding" appearance, and he presumed that it still retained the same features. He further stated that only two cases, thus far, have been reported in literature. It is probable that the child will be presented before the Society at a future meeting.

Exhibition of the "Koch's Comma Bacillus of Asiatic Cholera," by Dr. L. L. McArthur. The speaker addressed the Society orally, during which he stated that Koch had devoted more time and study to the solution of the cholera problem than any other physician; and from the fact that that he has so far established his theory over all opposing ones, and successfully met all arguments, no little interest in the subject is felt by the people of this country, inasmuch as cholera may cross the ocean during the coming summer. The comma bacillus of Asiatic cholera is distinguishable only when magnified about 1,000 times to 1,600 times. They can be taken into the stomach with water, and although very few may be swallowed, their power of reproduction is so wonderful that in a day the victim will be suffering the agonies of a fully developed case. The disease, the speaker continued, is said to be the irritation in the stomach and alimentary tract, caused by the presence of these *pests*. The water in the blood is lost, and, if the disease is not checked or arrested, death ensues. The germs pass from the victim, and by going through the sewers and down the rivers cause the disease and death to the people living along the streams. The germs may also be carried in the air, or in the clothing.

Moisture is an essential condition for their reproduction, or life. If they are put in a warm, dry place, they will die in a few weeks' time. Koch, in his experiments, carried this comma bacillus through forty cultivations or generations, and the last cultivation introduced into the stomach of a dog induced cholera Asiatica, and death resulted in three days.

The bacilli exhibited were received from Koch's laboratory but a few days ago, and were sent by Dr. Odo Betz from Tübingen, Germany, to Dr. Doering, of this city, and are the first ever exhibited in Chicago. A number of the members participated in an informal discussion of cholera Asiatica and cholera nostra, and the specimens were closely examined.

After which the Society adjourned.

Analyses, Selections, etc.

Rupture of the Urethra.—This rare injury is the subject of a paper by Dr. N. P. Wood, of South Londonderry, Vt., in the *Transactions of the Vermont Medical Society*, 1884. This injury is usually caused by a blow or a fall upon the perineum, although in rare instances it has been caused by violence done the pelvis, as by the rolling of cart wheels over this part of the body.

The rupture may be complete or incomplete. If complete, either wall may be the seat of the injury. The rupture is always transverse, and if the urethra is completely severed the ends are separated by contraction, to some distance.

The seat of the injury is that portion of the urethra which lies in relation to the pubic arch above, and the deep perineal fascia below. The external violence being applied drives the urethra against the pubic arch, and hence the injury.

When called to see a case of this kind, the story of the patient, the place of the injury, and the condition of the parts will do much to help to reach a diagnosis.

If the patient has fallen astride some narrow object, as the edge of a board, and a little blood has passed from the penis, a strong suspicion should be entertained that the urethra is ruptured. If within a few hours (or it may be within one hour), the scrotum, perineum, and surrounding parts become ecchymosed and swollen and there is retention of urine, and especially if a catheter cannot be passed into the bladder,

there is but little doubt of the nature of the injury. Sometimes a catheter can be passed to the rupture, and then it will pass into the tissue of the perineum if a silver instrument be used, or into the scrotum and then coil on itself if a rubber instrument be used. In the former case the catheter can be distinctly felt by the finger in the rectum, passing to the right or left, or behind the prostate gland; in the latter case it can be easily felt coiled up in the scrotum. Such an instance has occurred in my own practice.

The great danger to life attending the injury results from extravasation of the urine. Hence, first see that the bladder is kept empty. Usually a catheter can be passed soon after the accident, but if several hours intervene, catheterization is usually impossible, and the bladder must be reached in some other way. This may be accomplished either by aspiration above the pubes, by tapping the bladder per rectum, or by making an incision in the perineum along the line of the raphé. The latter is undoubtedly the best practice, as it allows the escape of extravasated blood and urine, and prevents better than either of the other operations the evil results attending the extravasation of urine.

Extensive hæmorrhage after the perineum is incised should always be controlled by the application of cold and pressure, and not by plugging the wound with a sponge, as evil results usually attend the latter procedure.

If the urethra is completely severed, the two ends can be drawn together by sutures, and healing generally proceeds quite rapidly. If only one wall is severed, the wound should be kept open to allow for the escape of blood and urine, and strict cleanliness enjoined. Cases treated in this way do quite well, healing proceeds satisfactorily, the patient being able to pass urine through the urethra in the course of a month or six weeks. Sometimes the wound heals with the exception of a small fistula opening just back of the scrotum, through which the urine escapes more or less freely. In such an event, this opening can be closed by a second operation. Stricture consequent upon this injury should be guarded against by frequent passages of a sound or bougie for some time after the wound is healed.

Thompsons's Disease.—From *La Gaceta de Sanidad Militar*, a translation is made by Dr. J. Workman, of Toronto, for *The Canada Lancet*, November, 1884, in which it is stated that this is a muscular affection, which has been brought into notice by several German physicians and one or two

French within the last few years. It has taken its name from the gentleman who, having himself been the subject of it, in common with a large number of his family stock, throughout five generations, was the first to treat of it with clearness and precision. No less than thirty-five members of the Thomsen kin were known to have been affected with the disorder. Hereditary transmission would therefore seem to underlie this morbid form, and it is by no means improbable that it has not been exclusively confined to Germany and France. The translator believes he has seen at least one distinctly marked case in Canada within the last two years.

Longuet details the disease of Thomsen. Leyden saw a discharged soldier who was unable to open his fist when he had shut it. When reading he was unable to follow out the lines. The movements of his tongue were impeded; he could not dance or run. In the same year, 1876, Thomsen and Seeligmuller published the first two memoirs on the subject, which were clear and precise. Thomsen, who furnished the first description of it, has given origin to the name by which it is commonly designated in Germany. All presented some form or other of neurotic character. Of thirteen of his mother's children, seven were affected with it. His own children also were affected, though in a mitigated form.

The case recorded by Seeligmuller was that of a recruit, who was a desperation to his drill instructors, because of the slowness and sluggishness of his motions, in spite of his own earnest desire, in the execution of the orders given him. At a later date, Peters, a surgeon-major, published his observations of a soldier, 20 years old, who was affected similarly. At the command, "march," he remained immovable, as if rooted to the ground; afterwards, having moved his arms and legs disordinately, he succeeded in starting, but he vacillated for ten or twelve paces before he could attain free movement. He was absolutely unable to run, and if he persisted in the attempt, he fell; his tongue and the maxillary muscles shared in the impotency; he could not raise his arms above the horizontal direction.

Westphal presented to the Medical Society of Berlin two patients, one of whom was a student of medicine and a nephew of Thomsen; he had been affected from his infancy.

The *symptoms* are always the same. The functional anomaly may be presented in any of the muscles of the body. One of Westphal's cases showed that after sneezing, the patient could not again open his eyes without great effort, and when eating he could not always shut his mouth when he

desired. The subjects of the affection have an athletic appearance, but their muscular force is only moderate. Westphal thinks there is a special congenital muscular perversion, coupled with an exaggerated muscular development.

Another recruit recently attracted the attention of Schonfield. This soldier was sent to hospital because, in his exercise, he suddenly fell to the ground, without any apparent cause. After a rest of ten minutes it was impossible for him to resume the march, at the word of command. He moved with great difficulty, and tottered and fell, rising again only with much difficulty. He had to proceed ten or twelve paces before he could move freely. When he sat down for any time, he could hardly rise again; the torpor, at such times, invaded the upper limbs, as the result of violent exercise. The speech was slow and drawing.

Mobins published in *Schmidt's Jahrbücher* a very complete analytic review, having personally observed a young student of theology, who was a military volunteer, sent in by surgeon-major Sane, who appeared to regard the case as a mimic form of the affection. This youth, after severe fatigue, suddenly became subject to cramps in the calves of his legs, and a stiffness of his limbs which left him powerless for many days. His father presented the same defects, which were exasperated by the fatigues of military service. After a march all his movements continued difficult for one or two days. Sometimes the loins were invaded, and after musket exercise, his arms, previously free from the trouble, became affected. The contracture is accompanied by a sensation of tumescence in the muscles attacked; but at other times by a sort of trepidation, like that from faradization; if the leg be extended, the whole limb enters into contracture, and remains for a time unable to bend.

A youth of 22, observed by Berger, presented in his exercise a torpor and rigidity which distracted his drill instructors.

The French productions on this subject consist merely of the memoir by Ballet and Maré, published under the inspection of Charcot, and supplemented by a recent article of Maré's, who has given the following details of a case under his own observance. The subject, from early age, found that he had special difficulty in making any movement; when he was in class and was ordered to retire, he could not rise. When called into the army, he exhibited, under examination by the council of revision, the infirmity under which he labored, but the military surgeons did not believe in it; he

was however set aside for two years, as of feeble constitution, at the close of which he was admitted. When he went to exercise, it was impossible for him to keep step with his comrades, and he had the like difficulty in managing his arms, as, in attempting the motions, he was seized with his contractures. The surgeon of his regiment declined to admit him as a patient, and he ordered him to the gymnasium to *soften him down*; but in these exercises also he was attacked with the cramps, and when, for example, he went to mount the wooden horse, he was seized in the moment of the effort with muscular contracture, and he fell violently against the horse. There is no painful feeling in the muscular contraction.

Does this rare and curious infirmity consist in a lesion of the medulla, situate perhaps in the lateral cords, or is it a simple functional anomaly of the medullary apparatus? Should the affection be localized in the periphery of the nervous system, or in the muscles? All of these have been hypotheses advanced by different authors, but none of them appear satisfactory. It is well that we should know that a form of nervous disease exists, which consists in *initial transitory muscular spasm, probably hereditary, incurable and independent of any appreciable lesion of the nervous or muscular systems*.

Malignant Flux in Southwest Virginia.—During the latter part of 1884, sensational reports became current through the daily and weekly papers of the State as to the prevalence of a most terrible and wide-spread epidemic of malignant flux in some of the southwestern counties of Virginia. These exciting reports were spread throughout the entire United States, and represented that man and beast were dying as cattle in a slaughter-pen; that the people who could had fled from their homes; that those who could not were suffering from starvation and all manner of wants, and that none were left to nurse the sick or bury the dead. The fields were represented as having been barren of crops or vegetation, and that utter desolation in its most painful aspects prevailed.

This state of affairs induced Dr. George E. Wiley, of Abingdon, Va., to go over into the counties thus represented as needy, and to offer his professional services to such as required them. The St. Louis cattle dealers and other parties had forwarded relief funds, upon which he was authorized to draw in order to afford relief. Dr. W. W. Gold, of Abingdon, and other druggists provided him with sufficient medi-

cal stores to satisfy any probable demands. In short, Dr. Wiley was well equipped to serve as a messenger of substantial mercy.

Dr. Wiley proceeded first through Wise county, and was surprised to find thrift and plenty on almost every hand, and that the people were indignant at the false reports which had become so widely circulated throughout the country. Some went so far as to threaten to "skin" the special correspondent of Washington city who, it is claimed, has shown himself to have a good "tact for lying."

Upon closer inquiry, however, the Doctor found out that since July 1st, 1884, a severe epidemic of "malignant flux" had prevailed in some of the southwestern counties of Virginia bordering on North Carolina and Tennessee. From that date to the time of his visit early in January, there had been about 200 deaths from this disease in Wise county, the population of which is about 7,000. In Dickenson county there had been 25 deaths; in Buchanan county, 20 deaths; in Russell county, 10; in Scott county, 15, and in Lee county, 6 deaths. In all six counties, from July 1, 1884, up to the time of the cessation of the epidemic, there were scarcely more than 300 deaths. The probable number of sick from "malignant flux" is not estimated.

From a careful examination of all the facts that Dr. Wiley could gather by observation and from statements of the leading physicians of Wise county, the disease has been "malignant flux," in many cases assuming typhoidal symptoms. "The patients were, as a rule, taken suddenly ill with vomiting and violent cramping of the bowels, similar to cholera morbus; the evacuations from the outset were attended with violent tenesmus and hemorrhage. The pulse was full and fast—from 120 to 150 per minute. The temperature was not taken by the thermometer by any of the native physicians, but it was, in their judgment, from 100° to 104° F. There was rarely wild delirium, and the patients, in fatal cases, lived from five to fifteen days. The mortality was greatest among the old people and children." The physicians who attended most of the cases in Wise county say that those patients who received no medical treatment did as well and perhaps better than those who had medical attention. This is a bad commentary on the value of the doctors.

The etiology of the disease is somewhat obscure. The water in the springs, etc., had undoubtedly become strongly impregnated with mineral salts, and in many instances animalculæ were very numerous. Last August the few showers

wet the leaves, but the warm weather soon decomposed the moist vegetable matter, which was washed into the springs and creeks by succeeding showers, none of which, however, were heavy enough to wash the creeks and springs clean. It is supposed that the vegetable poison remaining in the water, together with the mineral deposits therein, afforded an abundant cause for the disease.

There has, however, been no sickness of any kind with live stock—a fact of much commercial importance to the citizens of that section, which should be made as public as the false report which was so widely circulated to the injury of the commercial interests of the people.

Therapeutic Value of Oxygen.—Dr. Samuel S. Willian, of Bloomingdale, N. Y., by invitation, read a paper on this subject before the session of the Vermont State Medical Society, 1884, which possesses several points of interest. The paper appears in the *Transactions* under the title of “An Old Remedy Revived.” He states that the very first case on record in which artificial oxygen was used as a remedy was reported by Caillens in 1783. Jurine followed in 1784 with a short essay on the subject, and reported a case of phthisis in a young lady, very much benefitted by oxygen. In 1789 Chaptal, of Montpellier, reported two cases of phthisis, in one of which the gas gave marked relief, while in the other the effect was not beneficial.

As opposed to the teachings of our text-books, Prof. Binz, of Bonn, has shown that pure ozone, suitably diluted, can be inhaled with impunity, and without producing any of the irritant effects on the air passages usually ascribed to it. On the contrary, if its inhalation be carefully continued for some time, it induces a state of calm and pleasurable but transient sleep, not wholly unlike the anæsthesia* produced by the inhalation of nitrogen monoxide, results more intense, but *identical with those following the use of oxygen*. It is therefore reasonable to assume that the effects of artificial oxygen, exhibited therapeutically, are partly if not largely due to this indefinable state called ozone. The feeling experienced after

* Dr. William B. Gray, of Richmond, Va., contributed to the August number, 1878, of the *Virginia Medical Monthly*, a paper on “Experiments with Oxygen Gas,” which seemed to prove that pure oxygen gas, when sufficiently inhaled, possesses decided anæsthetic virtues. These experiments have been repeated by Dr. Gray with results confirmatory of his original observations. Teeth were extracted without pain. It is possible that in these experiments there was a trace of nitrous oxide in the gasometer used for the reception of the pure oxygen, from which apparatus the oxygen was administered.—Note by EDITORS VA. MEDICAL MONTHLY.

inhaling pure oxygen, artificially prepared, is one of restfulness rather than of stimulation.

To give a condensed summary of the most noteworthy effects observed after a few weeks judicious use of the oxygen treatment, by which I do not mean merely a few daily inspirations of unmodified oxygen gas, there will be, almost uniformly, observed: (1) Increased activity of the assimilative and excretory functions; (2) Improved digestion and relief of constipation; (3) Equalized circulation,—extremities warm; (4) Relief of anorexia,—normal appetite returning; (5) Clearing of the skin and complexion; (6) Dyspnoea from any cause relieved; (7) Spasmodic asthma promptly mitigated; (8) Habitual headaches cured or materially alleviated; (9) Neuralgias of almost every form overcome; (10) Marked increase of breathing capacity; (11) Softening and resorption of morbid deposits; (12) Steady increase in the volume of blood; (13) Progressive “toning up” of nervous and muscular systems; (14) Restoration of the voice in cases of nervous aphasia and lost vocal power; (15) Increased buoyancy of spirits, and removal of neurasthenic conditions; in a word, *increased physical and mental vigor*.

A standard mixture in Dr. Wallian's practice, which extends back to 1868, consists of equal volumes of pure oxygen, nitrogen monoxide, and common air. The addition of nitrogen monoxide (the “nitrous oxide” of the old nomenclature) to pure oxygen is an important point, and one which has been almost wholly overlooked by experimenters with the latter gas. Its use has been chiefly left to advertising adventurers, who have in some instances acquired both quasi fame and substantial fortune by lauding it in glowing advertisements, under one or another trumped up name, as “vitalized air,” “oxygenized air,” “compound oxygen,” etc. It is by no means the first instance in which shrewd “irregulars” have anticipated the profession, and gathered a catch-penny harvest while scrupulously “legitimate” laborers were yet asleep!

In a therapeutic sense, and as a synergist of that element, nitrogen monoxide is scarcely second to oxygen itself. Used alone, it is unquestionably the most pleasant and safest anæsthetic yet discovered; but, unfortunately for surgical purposes other than brief operations, its anæsthetic effects are very transient.

In this connection it ought to be better known that the addition of twenty per cent. of pure oxygen to this gas renders its effects as an anaesthetic more pleasant, and *absolutely*

free from danger in any case, cardiac and pulmonary complications forming no exception.

The recent experiments conducted in Prof. Botkin's laboratory at St. Petersburg (as reported in Virchi), prove that the inhalation of a mixture of eighty per cent. of nitrogen monoxide and twenty per cent. pure oxygen, produces various decided results capable of therapeutic application.

Among the conditions speedily and pleasantly relieved may be mentioned: Irregular respiratory rhythm; the suffering in *angina pectoris*; cough and vomiting of reflex origin; weak heart action. It also proved itself a better and a safer anæsthetic than chloroform in labor.

Lithiated Hydrangea in Nephrolithiasis.—The Editor of the *Mississippi Valley Medical Monthly* having been the subject of this disease, gives his gratifying experience with this agent. When an attack of renal colic threatens, he prefers one to six drachms of sodium phosphate, as recommended by Heller. When the stone becomes impacted in the ureter, a hypodermic of morphia relieves the pain, relaxes the spasm, and causes the stone to pass on to the bladder. If this fails, hot baths and chloroform inhalations become necessary. He thinks deficient watery excretion by the kidneys and excessive elimination by the skin the cause of the great prevalence of nephrolithiasis during long-heated seasons; and also that there are certain articles of diet which increase the tendency to the formation of renal sand and gravel. Of these, animal food in excess, and two of the vegetable kingdom (asparagus and tomatoes) are prominent. The next and most important factor is derangement of the biliary organs, for which the kidneys have to do compensative duty. The "sand-kidney" rarely, if ever, occurs except as a concomitant of hepatic disorders. Hence, in preventive treatment—especially in tropical climates—we should always direct attention to the liver.

Having noticed the passage of biliary concretions in some of the cases of nephrolithiasis, and the viscid condition of the bile in other cases, the Doctor first used the benzoates, as suggested by Harley, with eminently satisfactory results. The object is to divert a liberal quantity of water from the skin, and direct its passage through the kidneys so as to dilute the urine, prevent new formations and wash away those already existing. For this purpose, there is nothing better than the preparations of lithia and potassium, taken in conjunction with diuretic water from some of the mineral springs. [Here in Virginia there is no water more beneficial than that

from the Buffalo Lithia Springs.] For the past two summers the Doctor has used the "Lithiated Hydrangea," as prepared by Messrs. Lambert & Co., of St. Louis, with the best of prophylactic results. It contains the ingredients to which he has long given preference, and, *in addition*, hydrangea—a remedy of great repute in this form of disease. At any rate, the benzoates contained in this preparation are especially indicated in the conditions marked by thickened biliary secretion, and the lithiates and hydrangea increase the flow of urine without materially stimulating the kidneys.

Cocaine and Its Salts.—The profession is to be congratulated on the existence in this country of such firms of manufacturing pharmacists as give to the preparations bearing their names the assurance of perfect conformity to the recognized standards of purity and strength. Such assurance is specially desirable in the case of drugs of more recent introduction, as, for instance, cocaine and its salts, the inferiority of any preparation of which is apt to bring them into disrepute. The virtues of cocaine as a local anæsthetic are too well known to require further argument for their support, and the physician who specifies Messrs. Parke, Davis & Co.'s preparation thereof need have no apprehension on the score of its activity. This sterling firm furnishes the alkaloid and its various salts—the hydrochlorate (on which the virtues of the drug are chiefly based), the citrate, the oleate, and the salicylate. The special therapeutic features of the latter salts will suggest themselves to the physician who is familiar with peculiarities of the acids entering into them.

Peculiar Action of Cocaine.—Dujardin-Beaumetz has noticed the occurrence of syncope in several cases after the hypodermic injection of weak solutions of this drug. He believes it due to cerebral anæmia, and says it will not take place if the patient be kept in a horizontal posture.

Salicylic Acid for Cerebro-Spinal Meningitis.—Dr. Ramsey employs frequent large doses of this drug with very gratifying results for this disease—giving adults fifteen grains every two hours and increasing the dose as may be required to reduce temperature, relieve pain, and restore placid countenance.—*Dr. Carter in Proceedings Nebraska State Medical Society, 1884.*

Book Notices, &c.

Surgical Delusions and Follies. By JOHN B. ROBERTS, A. M., M. D., Professor of Anatomy and Surgery in the Philadelphia Polyclinic, Surgeon to St. Mary's Hospital. Philadelphia: P. Blakiston, Son & Co. 1884. 16mo. Pp. 55. (For sale by West, Johnston & Co., Richmond, Va.)

This volume, small in size as it is, contains perhaps more real practical suggestions than many of the more paraded and voluminous medical works. It is the natural outcome of the address delivered by Dr. Roberts before the Medical Society of Pennsylvania, in 1884. He there read a paper, written upon this special subject, and in this little monograph has simply taken a larger view of the common follies and delusions of our surgical practitioners—errors which are every day committed. We most decidedly take issue with him on some few points, notwithstanding that the book generally is extremely valuable, in our opinion. He refers with much disapprobation to what he terms the “small-dose follies.” Now, we have for years employed, in certain instances, small, frequently-repeated doses of some few medicines—we do not necessarily refer to those drugs generally ranked among the poisonous in our materia medica—and, where the circumstances were favorable—diagnosis being correct—we have found, to our satisfaction, better results than had been obtained from pharmacopœial doses given in previous cases where the surroundings were the same. But we did not intend to find fault with the subject-matter—where there is so much practical thought presented to the reader, and we earnestly wish that every doctor who has read in the *Monthly*, and other journals, portions of this admirable essay, may be able to examine in full the apparently audacious views of Dr. Roberts. C.

A Manual of Dermatology. By A. R. ROBINSON, M. B., L. R. C. P. and S. (Edin.). Professor of Dermatology at the New York Polyclinic, Professor of Histology and Pathological Anatomy at the Women's Medical College of the New York Infirmary, etc. New York and London: Bermingham & Co. 1884. 8vo. Pp. 647. Cloth. Price, \$5.00. (For sale by West, Johnston & Co., Richmond, Va.)

This handsome volume is presented to the subscribers to “Bermingham's Medical Library,” as a concise account of our present knowledge of the subject of Dermatology; and although this may seem an ambitious attempt on the part of

the author, he has confidence enough in himself to say, that it is intended only to be a basis for a much larger and more pretentious work, to be issued in the future. Dr. Robinson hardly feels that he has given his subject full justice in a book of this size, as he has cut off a considerable amount of matter relating to histology and treatment which he desired to present to the profession. However, his experience of fifteen year's careful work in this specialty warrants the conclusion that he is fully able to offer a volume of which the title is not a misnomer. The manual is really an excellent one, and is well worth the attention of the general practitioner. It is intended for his use more than for that of the dermatologist. All of the modern views concerning pathology and treatment of skin diseases are fairly represented in the book, and the author has endeavored to not only give the opinions held by himself, which he thinks worthy of mention, but also those of other authorities, even when conflicting with his own. That portion of the book for which the publishers are responsible is well done, according to the custom of the house whose imprint appears on the title page. One of the points to be noticed in this regard is the broad margin of each page, enabling the student to make marginal pencil references without the usual cramping of the written lines. The book is to be generally commended to the every-day doctor.

C.

The Lock-Jaw of Infants. (Trismus Nascentium.) By J. F. HARTIGAN, M. D., Washington, D. C. New York and London: Birmingham & Co. 1884. 12mo. Pp. 123. Cloth. Price, 75 cents. (By mail from publishers.

This neatly bound little volume deals exclusively with that unfortunate condition of infants called in different sections of country "nine-day fits," "crying spasms," etc. The author traces the history of this disease back to the times of Hippocrates and Celsus, and following medical literature down to the modern day, shows how almost universally it was considered fatal, although even until within the last thirty-five years its true pathology was entirely misunderstood. It remained for the immortal Sims to point out the real cause, and in sequence the possible means of cure of this dread affection. The author pays the greatest respect to the views of the dead surgeon and adopts his theories fully. He very pardonably wishes that his book could be accessible to mothers and nurses everywhere, so that by following the

teachings therein given, much might be done toward preventing this scourge of infant life. There has been, perhaps, no one infantile affection about which so much has been written, and concerning which so many contradictory statements have been printed as the one here referred to; but we think that any fair minded reader, on laying down this book after perusal will agree with us that the writer has presented, with excellent effect, the ideas originally offered by Dr. Sims, ably reinforced by his own, which are well worthy of attention.

C.

The Story of My Life. By J. MARION SIMS, M. D., LL. D., edited by his son, H. MARION SIMS, M. D. New York: D. Appleton & Co., 1884. Pp. 471. Cloth. Price, \$1.50. (For sale by West, Johnston & Co., Richmond, Va.)

This book, like all biographies or auto-biographies, should be carefully read with a certain amount of allowance. It seems to us that the story of the life of the man who was almost a demi-god in the profession is something more than can be placed in our common language. Dr. Sims was a man among men. Taking his chance in the cosmopolitan city of the New World—a comparative stranger to those of his own calling—by mere force of will, and that great gift which all geniuses possess—perseverance—he accomplished in his day a work which ordinary men would have deemed impossible; and, fortunately, before he died the medical world showed its appreciation of the accomplishment of his task. The book before us shows the man as he was to his family and intimate friends—the frank, out-spoken Southerner whose daily work was to do good as far as his humble powers admitted—and who endeavored day by day to decrease the mental and physical suffering which was endured by those surrounding him. This book gives so plainly and modestly the estimate Dr. Sims placed upon his own work, that, if for nothing else, it would be of value as a model for future auto-biographies, and much as we dislike to refer to such faults, we must say that the author's "story" shows even more modestly than it otherwise would, because of its striking contrast with the fulsome "hero-worship" of Judge Mackey's introduction. Every admirer of the great gynecologist should read this book, not only as a memory of the successful man, but also to see how easy it is for a young man to misunderstand his own abilities in beginning the work of his life, for Dr. Sims did not want to study medicine, but thought nature had best fitted him for the life of a clerk in a country store.

C.

A Practical Treatise on Palatable Prescribing. By B. W. PALMER, A. M., M. D., Author of "Favorite Prescriptions of Distinguished Practitioners," etc. Detroit: George S. Davis. 1884. 12mo. Pp. 136. (By mail from publishers.)

To those doctors who desire to know exactly what some of the eminent men of the profession are doing in certain stages of disease, and who also wish to copy their work, this little book is valuable; and of course to every practitioner such a volume contains much of interest. We all like to know what combination of medicines such physicians as Vogt, Wendt, Majendie, Niemeyer, Clark, Budd, Skene, have been in the habit of prescribing in different groups of symptoms. Yet one cannot help but believe that it is a bad system of practice to get into the use of routine prescriptions. Even the same train of symptoms in a certain disorder shows differently in different people, and cannot always be conquered by precisely the same treatment. It is plainly to be seen after perusal of this book, that the author has successfully endeavored to gather and arrange "the most desirable formulæ for the administration of the new drugs which recent therapeutic research has contributed to the *materia medica*," and in that we think he has furnished much of benefit to the general practitioner. Whatever we may think of a book of ready-made prescriptions, it is always pleasant to have at hand a volume showing some of the best combinations of the newer drugs, and for this we can recommend this work to our readers.

C.

Hooper's Physician's Vade Mecum. A Manual of the Principles and Practice of Physic. Tenth Edition. Revised by WILLIAM AUGUSTUS GUY, M. B. Cantab, F. R. S., Fellow of the Royal College of Physicians, etc., and JOHN HARLEY, M. D., Lond., F. L. S., fellow of the Royal College of Physicians, etc. Vol. II. New York: Wm. Wood & Co. 1884. 8vo. Pp. 353. (For sale by West, Johnston & Co., Richmond, Va.)

This June, 1884, issue in "Wood's Library of Standard Medical Authors," is the completion of that venerable still valuable authority—"Hooper's Vade Mecum." What old practitioner but can remember the high standard it held, years ago, in his "green and salad" student days! "Age cannot wither, nor custom stale" its value to the student of medicine. Re-edited and revised as it has been during the years it has been before the medical public, this—the tenth edition—though an old friend, seems almost like a new one,

because of the changes wrought in it, and it can be safely commended in preference to many other works of the kind of a newer generation. This second volume treats of diseases of the nervous, circulatory, respiratory, digestive, urinary, generative and sensory systems, together with those of the skin, those produced by the presence of parasites, and those caused by poisonous substances. At the end of the work, a classification of remedies, with formulæ, and a glossarial index, add much to the worth of the volume. We can only repeat the words of praise we have before given to the preceding editions. "Wood's Library," at \$15.00 per year, contains few books better worth a place on the shelf of the young practitioner than the two volumes of "Hooper." C.

A Manual of Bandaging. By C. HENRI LEONARD, A. M., M. D., Professor of Medical and Surgical Diseases of Women and Clinical Gynecology, Michigan College of Medicine, etc. With one hundred and thirty-nine Engravings. Second Edition. Revised and Enlarged. Detroit: Illustrated Medical Journal Co. 1884. 8vo. Pp. 159. Cloth. Price, \$1.50, post-paid. (By mail from publishers.)

When, in 1877, we noticed the first edition of this book in the *Monthly*, we spoke highly of its merits and predicted for it the success it has so deservedly attained. Of this revised and enlarged edition we have but little to add to our praise of former time. It is most excellent. No work treating of like matter is superior or even equal to it, and but one which we have seen even approaches it in value. In this edition much new material as well as many new engravings have been introduced, the contents of the book having been increased nearly one-fourth, the result being to present to the medical public a manual equally valuable to the student or the regular practitioner. Too much praise cannot be given to the cleverly executed cuts. Any one with the slightest possible knowledge of the use of the roller can soon make himself an expert in the art of bandaging by examination of these with a reading of the accompanying text. Dr. Leonard is to be congratulated as a didactic teacher on this very important portion of the study of minor surgery. C.

Diseases of the Nose.—By CLINTON WAGNER, M. D., Professor of the Diseases of the Nose and Throat in the New York Post-Graduate Medical School, etc. With illustrations of Instruments and Pathological Conditions. 1884. New York and London: Bermingham & Co. Pp. 252. Cloth. Price, \$2.50. (By mail from publishers.)

The author—after the experience of a medical practice extending over a quarter of a century, more than half of which time has been devoted to the exclusive study and practice of laryngology and rhinology—feels qualified to present to the practitioner a work dealing entirely with nasal diseases, and we judge, after careful examination of the book before us, that he has not underrated his qualifications. The matter is excellent, and the manner of the writer is plain and convincing. He does not lead us into new paths, but he lays proper emphasis on the correct methods of diagnosis and treatment. His words show how futile it is to attempt investigation of most forms of nasal disease without the aid of modern rhinoscopy, and his description of the modes and instruments employed is not only complete, but at the same time clear and simple. The chapters relating to ozæna and epistaxis are especially of value to the general practitioner; and although the volume is evidently written for the use of the specialist, there are many points in it well worthy the consideration of those of us who profess only to be “plain every-day doctors.”

C.

Malaria and Malarial Diseases. By GEORGE M. STERNBERG, M. D., F. R. M. S., Major and Surgeon U. S. Army, etc. New York: William Wood & Co. 1884. 8vo. Pp. 329. (For sale by West, Johnston & Co., Richmond, Va.)

The July, 1884, No. of “Wood’s Library” is fully the equal of those comprising the former volumes, and has in itself certain elements of popularity which have already been recognized by medical reviewers. Dr. Sternberg acknowledges the fact that he has labored under certain disadvantages in writing this book, but greatly to his credit, it may be said, that he has in a most thorough manner fulfilled his task. Difficult as the subject of malaria is to write about, and uncertain as many conclusions drawn from our present knowledge of the matter must necessarily be, yet the author has succeeded in presenting the few positively known points in such a manner that the ordinary practitioner can fully appreciate them, and value them accordingly. The subject itself appeals strongly to the Southern and Western physicians, and they will find the book one of extremely valuable

reference. To those doctors practising in "bottom" districts we especially recommend the volume. C.

Handbook of Eclampsia; or, Notes and Cases of Puerperal Convulsions. By Drs. E. MICHENER, E. H. STUBBS, B. THOMPSON, R. B. EWING, and S. STEBBINS, of Chester county, Pa. Philadelphia: F. A. Davis, Attorney. 1883. 16mo. Pp. 68. Muslin. Price, 75 cents. (From publishers.)

This little book contains notes based on all the cases (44) of puerperal convulsions which have occurred during the present century within a radius of several miles around Avondale, Pa., so far as can be ascertained. The authors are warm advocates of blood-letting—of *bleeding for effect*; not to take a prescribed number of ounces of blood from the system. Let the bleeding be from a *large* orifice. This brochure, if generally read, as it should be by all who seek responsible clinical facts, would perhaps do much to restore to custom again, with legitimate boundaries, "the lost art"—that of bleeding in puerperal eclampsia.

PAMPHLETS, REPRINTS, ETC., RECEIVED, for which we have no room for fuller notice, etc.; but most of which can be obtained by enclosing a letter-stamp for pamphlet to the respective authors named.

Experimental Researches on Cicatrization in Blood-Vessels after Ligature. By N. SENN, M. D., Milwaukee, Wis. 8vo. Pp. 117. Pamphlet. [This lengthy reprint from the *Transactions* of the American Surgical Association, 1884, deserves more than a passing notice, had we the space to devote to it. It is classical and full of instruction. It contains the most complete history of the ligature we have met with in our readings. The next section is on "Histology of the Blood-Vessels." Subsequent sections describe the different kinds of ligature, the mode of applying them, and the results that come of their application. He describes the processes of cicatrization and the results, so far as they concern the blood-vessels. He uses nothing but aseptic material. The discussion, as reported, by Drs. McLean, of Detroit, Campbell, of Augusta, Ga., Gregory, of St. Louis, Billings, of U. S. Army, B. A. Watson, of Jersey City, and Nancrede, of Philadelphia, add much of interest and suggestion to the paper of Dr. Senn.]

Memoir on the Nature of Diphtheria. By Drs. H. C. WOOD and H. F. FORMAD, of Philadelphia. 8vo. Pp. 84. From Publishers, J. B. Lippincott & Co., Philadelphia. [This

Memoir is "Appendix A to the Report of the National Board of Health for 1882," the first chapter of which is on the "Structure of the Diphtheritic Membrane." The next chapter speaks of the "Clinical Relations of Micrococci to Diphtheria." The "Natural History of Micrococci" next engages attention; then the "Relations of Micrococci to Diphtheria." The last chapter is on the "Relation of Diphtheria and its Micrococcus to Other Diseases." Many original experiments and other observations are recorded, and the text is illustrated by many wood-cuts and photographs of microscopical specimens.]

The Relations between the Mind and Nervous System. By WILLIAM A. HAMMOND, M. D., New York. Pp. 32. [This is the title of the address delivered by this genius of a doctor during the celebration of the Founders' Day of Lehigh University, October 9, 1884. One can scarcely put the address down before he finishes reading the whole of it, and then he rises with a sense of having been profited during the whole time that he was so highly entertained.]

Acetate of Lead in Ocular Therapeutics. By DAVID DEBECK, M. D., Assistant to the Chair of Ophthalmology, Medical College of Ohio. 8vo. Pp. 11. [This reprint from the December No., 1884, of the *Ophthalmic Clinic*, of Cincinnati, is very practical in its teachings, useful especially to eye surgeons and to therapeutists. The paper is given more to pointing out the common abuses of sugar of lead in eye practice than to its many uses.]

A Contribution to the Relations of Ovulation and Menstruation. By A. REEVES JACKSON, A. M., M. D., Professor of Gynecology, College of Physicians and Surgeons of Chicago, etc. [After a concise review of recorded facts, the author arrives at very just conclusions in this reprint of nineteen pages from the *Journal of the American Medical Association*, October 4, 1884. The paper was read before the Section of Obstetrics and Diseases of Women of the American Medical Association, in May, 1884, a report of which was made in the June No., 1884, of the *Virginia Medical Monthly*.]

Relation of Micro-Organisms to Surgical Lesions. By HENRY O. MARCY, A. M., M. D., of Boston. [Reprint of sixteen pages from the *Journal of the American Medical Association*, November 1, 1884, of a paper read before the Section of Surgery and Anatomy of the American Medical Association, May, 1884.]

Editorial.

The Virginia State Board of Medical Examiners will have a plenty of work to do at its session, which is to convene at 10 A. M. Wednesday, April 8th, 1885, at the Exchange Hotel in this city. Its first duty, of course, will be to examine candidates for practice in Virginia who have entered the profession since January 1st, 1885, or who have removed from other States into this since the date named. Letters relating to the powers and plans of the Virginia State Board of Examiners are frequently received by the Editors of the *Monthly* and by the Secretary of the Medical Society of Virginia which we have no authority to answer, because the State Board has as yet made no decisions in such matters. We urge a full attendance of the Board at its next session so as to render such decisions in advance of occurrences which may be hereafter carried to court, in order that all parties interested may know exactly what will be the interpretations of the law by the Board.

A question often asked us relates to street venders and transient or itinerant quacks. Notwithstanding the law of Virginia as it now exists, it is an almost daily occurrence that some "travelling doctor" stops in this city, secures a license as in former days, registers himself at some hotel or boarding-house, and issues a card or otherwise advertises where he may be found and for what diseases he may be consulted by the people. In many such instances these quacks receive "compensation" for their advice, as well as payment for their nostrums, etc. To all intents and purposes, this is practising "medicine or surgery," as the case may be, in violation of section 7 of the "Act to Regulate the Practice of Medicine and Surgery" as passed by the Virginia Legislature, 1883-4. These venders, it is true, secure local and, it may be, State licenses; but the question is, Have Commissioners or Clerks of Courts—State, County or Municipal—the right to issue such licenses in face of the existing law? If these officers of the law are not violating the law, then the law itself is not effectual, and steps should be immediately taken to so correct the "Act" as to make it cover the class of cases referred to. According to our understanding of the intent of the law, it was to exclude quackery of every form, so far as practicable, from Virginia.

Section 7 of the Virginia Act begins: "No person who shall *commence* the practice of medicine or surgery after the

first day of January, 1885, shall practice as physician or surgeon for compensation," etc. Some claim that this clause permits the influx into Virginia of practitioners from other States, who commenced practice years ago *without* passing examinations of the State Board. We think, however, that section 8 of the "Act" referred to clearly defines the meaning of the wording of section 7 which we have quoted. The "Act" distinctly refers to doctors in Virginia and none others.

There are many other questions that have been raised which our space does not permit us here to point out, but which no doubt have come to the knowledge of some of the Board, which ought to be settled at once. It has even been intimated that the entire "Act" is unconstitutional—that it affects the liberty of people to select for themselves a legitimate profession or avocation. Of course, we have no doubt in our own minds as to the constitutionality of the law as it exists. But to keep down worry and contention, would it not be well for the Board to test the constitutionality of the law on the very first case that presents itself for trial? If the law is unconstitutional, then it is worthless, and renders every act of the Board nugatory and of no effect. Let such a case, if it arises, be carried as rapidly as possible to the Court of Appeals for final decision and for public information. If we are wrong, let us get right; if we are right, let us stand firm in the execution of the law until we rid the profession and the State of every possible form of quackery and charlatany. The question being as to the constitutionality of an Act of the Virginia Assembly, the State Board of Examiners would be at no expense for legal proceedings, since the Attorney-General is employed by the State to defend her interests in all such matters.

"The Physician Himself."—So popular has this work by Dr. D. Webster Cathell, of Baltimore, become, that a fourth edition has been called for, which is now passing through the press. It will be greatly enlarged and improved. Every practitioner should read this book, and especially as a token of regard and good wishes from a friend to a young physician in the formative stages of his professional career, we know of no gift that can do more good. Inquiries regarding the volume may be addressed to Dr. Cathell.

The American System of Practical Medicine—the first volume of which we noticed in our January number—will ap-

pear in five imperial octavo volumes, containing over 1100 pages each, with illustrations. The volumes will appear at intervals of about four months; hence Vol. II will be ready about June, 1885. Price per volume—cloth, \$5; leather, \$6; half-Russia, \$7. We take pleasure in making this announcement as an addition to the notice given in our last issue. Messrs. Lea's Brothers & Co., of Philadelphia, are the Publishers.

Dr. J. E. Chancellor, of University of Virginia, late President of the Medical Society of Virginia, during the past winter has been filling the chair of Obstetrics and Diseases of Women in the Medical Department of the University of Florida. He has however just resigned his professorship. During the absence of the Professor of Anatomy, Dr. Chancellor also gave a full course of lectures on this branch. We know the Doctor to be at home in this department.

Lea Brothers & Co.—We take pleasure in acknowledging the receipt of a handsomely finished little book from the firm of Lea Brothers & Co., of Philadelphia. It tells the story of that excellent publishing house since its foundation, one hundred years ago. Although monotonous in its ever increasing firm prosperity, it is interesting even to the casual reader. Since Matthew Carey, of Ireland, founded the house in 1785, generations in direct descent from him, have placed their name or names at the head of the title of the firm, and now at the expiration of a century's business life, the living partners feel a pardonable pride in presenting to their friends a record of the work of the house. In this connection we may mention the remarkable fact, that, during this long term of years, no member of the firm has dissolved his connection with it by death, but each one, in turn, has retired as years brought age and desire for rest, and in each case the retirement was made, not only with a well-earned competency, but also at a period of health when such a competency could be enjoyed for a considerable length of time. We have only the best wishes for the new firm, and earnestly trust that the prosperity heretofore attaching to the house may (as in all human probability it will), be continued not only to, but beyond, the period of retirement of the present youngest members of the firm.

American Medical Association.—The thirtieth annual session of this Association will convene in New Orleans at 11 A. M.

Tuesday, April 28th, 1885. The regular announcement of the Secretary will no doubt be issued in a short while, giving the usual detail as to programme, routes, etc. The "World's Fair" will also be in full progress during the session of the Association, which fact will add greatly to the attendance both by the doctors of the country and their families and friends. Dr. Wm. B. Atkinson, of Philadelphia, is Secretary; Dr. Henry F. Campbell, of Augusta, Ga., President.

The Editor of the Journal of the American Medical Association, Dr. N. S. Davis, of Chicago, in the issue of March 7, 1885, states positively that his connection with the *Journal* as Editor will be discontinued on completion of the current volume—June 30, 1885. The *Journal* began with about 2,500 subscribers in July, 1883; now it has about 4,000. It will be a very important matter for the Board of Trustees to make a selection of Dr. Davis' successor.

Dr. James E. Reeves, of Wheeling, West Virginia, we regret to announce, has been compelled by ill health to resign his position as Secretary of the West Virginia State Board of Health. His services were valuable to his State and to the profession generally, and we sincerely hope that he may so far recover his strength as again to enter upon duties related to the State Board. Dr. L. D. Wilson, of Wheeling, has been appointed as his successor by the Governor of his State.

Proposed New York State Medical Examiners' Bill.—During the recent session of the Medical Society of the State of New York (February, 1885), a unanimous agreement was reached as to the construction of a bill to be presented to the Legislature of that State which it is believed will pass, and meet with favor from the general public. It is proposed that there shall be but one Board, to consist of nine members named annually by the Board of Regents. Three shall be members of the State Society, but not connected with colleges. Three shall be members of this Society, and shall be connected also with colleges. And three shall not be members of this State Society, but shall represent the other incorporated State Societies in proportion to their membership. After the results of examinations on anatomy, physiology, histology, chemistry, pathology, therapeutics, hygiene, surgery, and obstetrics have been recorded, then three sets of questions—prepared respectively by representatives of the Medical Society

of the State of New York, the Homœopathic Medical Society of the State of New York, and the Eclectic Medical Society of the State of New York—shall be given to each applicant, and the applicant shall elect which one of said sets of questions he or she shall answer.

Index Medicus.—It is reported, we know not on how reliable an authority, that Geo. S. Davis of Detroit, Mich., will become the publisher of this invaluable monthly. If the report is correct, the publication could not be placed in better hands.

Adulterated Sulphate of Quinia.—Dr. Cyrus Edson, of the New York Health Department, has during the past winter been engaged in examining samples of quinia suspected of being impure, and the results are in some instances surprising. In the case of one sample purchased from a retail druggist on Third avenue, the investigator found it adulterated with 50 per cent. of sugar of milk. Why the salt should be so reduced in strength just now, when the genuine article has been so cheap, is really a mystery.

Obituary Record.

Dr. Edwin Samuel Gaillard died at his home, at Ocean Grove, near Long Branch, New Jersey, February 2, 1885; aged fifty-eight years. He was born in Charleston District, S. C., January 16, 1827. He graduated in letters from the South Carolina University in 1845, and received his medical diploma from the Medical College of South Carolina in 1854, after which he settled in Florida. In 1857 he removed to New York, but in 1861 he went to Baltimore, and two months later joined the Confederate army in Richmond, remaining in it until the close of the war. In 1861 he served as Assistant Surgeon of the First Maryland Regiment, and then surgeon of the same. In August, 1861, he was promoted to the rank of Brigade Surgeon. The next month he was made Medical Inspector of the Army of Virginia, and in October, 1861, he became Medical Director of one-half of the Confederate Army. In December he was made a member of the Medical Examining Board of the Army of Vir-

ginia, Medical Director of the Department of Aquia in 1862, and two months later Medical Director of one-half of the Army around Richmond. He lost his right arm in the battle of Seven Pines, May 29, 1862, but returned to duty in August, when he was assigned as Medical Director of the Department of North Carolina and Virginia, being in charge of all the hospitals in those two States. After three months' illness he was appointed Medical Inspector of the Hospital Department in April. In December, 1863, he was assigned to duty as General Inspector of the Confederate Hospitals, serving in that capacity until the end of the war. In 1865 he took up his residence in Richmond, where he founded the *Richmond Medical Journal*, January, 1866. In 1867 he was elected Professor of General Pathology and Pathological Anatomy in the Medical College of Virginia. In 1868 he moved to Louisville, when he was elected to the same chair in the Kentucky School of Medicine, of which he became Dean. He carried his journal with him, to which he then gave the name of *Richmond and Louisville Medical Journal*. In 1874 he also established the *American Medical Weekly*. These journals were kept up until failing health compelled his removal, about 1880, to New York, when he founded *Gaillard's Medical Journal*, which still continues, and is hereafter to be published under the management of his wife, Mrs. Mary E. Gaillard, and his son, Dr. E. W. Gaillard, with a well-selected corps of editors. In 1869 he was appointed Professor of the Principles and Practice of Medicine and General Pathology in the Louisville Medical College, of which he became Dean. In 1873 he received the honorary degrees of A. M. and LL. D. from the University of North Carolina. He was a member and honorary member of many local and State societies. In 1879 or 1880 he became the victim of abscess of the liver, and upon his case Dr. J. Marion Sims based some very instructive remarks before the Medical Society of Virginia, during its session in 1880 at Alexandria, Va. No man in the profession, perhaps, was more untiringly active than Dr. Gaillard, notwithstanding the suffering he so frequently and almost continuously endured until his death, because of neuralgia arising in the stump of his amputated arm. As a journalist he won more than a national reputation. He was the recipient of the Fiske Fund Prize in 1861, and the Prize of the American Medical Association in 1865. In 1856 he was married to Miss Jane Thomas, of Charleston, S. C., who died in 1860, leaving no children. In 1875 he married Miss Mary Eliza-

beth Gibson, of Richmond, daughter of the late Dr. Charles Bell Gibson, whose reputation as a surgeon was known throughout the United States. By this marriage there were five children.

Dr. Louis Elsberg.—This celebrated specialist in laryngology died at his home, in New York city, on the 19th of February, 1884, after an acute illness of only ten days. For several years he had suffered from Bright's disease, but his decease was attributable to pulmonary œdema resulting from a cold. No writer or lecturer on this special subject, in America, had so extended a reputation as an authority as he enjoyed. Born in Prussia, April 7, 1837, he came to this country with his parents in 1849, and after graduating from Jefferson Medical College in 1857, he received a hospital appointment in New York city, as resident physician. His first visit to Germany was made, a few years afterward, just as Czermak introduced the laryngoscope to the notice of the profession, and was a member of that Professor's first class. On his return to this country he was made Professor of Laryngology and Throat Diseases in the Medical Department of the University of New York, and there instituted the first throat clinic in America. He was the first President of the American Laryngological Association, and in 1880 founded the *Archives of Laryngology*. At the time of his death he was Professor of Laryngology at Dartmouth College, and held the same chair at the New York Polyclinic. A devoted student, of wonderfully retentive memory, and an excellent teacher, his death at the comparatively early age of forty-eight, was due mainly to his unflagging industry in his profession, and it leaves a gap in the ranks of the most prominent specialists of the New World, which will remain unfilled for a long time.

William Braithwaite, M. D., the well-known English physician and surgeon, and the founder of *Braithwaite's Retrospect*, died recently at his home in Leeds, in his seventy-eighth year. He commenced the practice of medicine in Leeds in 1830, and filled several posts of trust in the hospitals and infirmaries of that city. The first number of his *Retrospect of Medicine* appeared in 1840, and has now reached the ninetyeth volume. It has been republished in America for several years, and is as widely known and valued here as in England. The publication will be continued under the direction of his son.—*Journal American Medical Association*, March 7, 1885.

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Original Communications.

ART. I.—**Prevention and Treatment of Mammary Abscess.** By WM. RHYS PRYOR, M. D., Assistant Surgeon New York Polyclinic; Assistant Gynæcologist Elizabeth Hospital, etc., New York, N. Y.

A woman gives birth to a living child which nature intends her to nourish for many months by means of her lacteal secretion; but after nursing it for a few days, she finds that one of her nipples is exquisitely tender, and the act of nursing extremely painful to her; hence, she does as little of it as possible. An examination of the breast at this time will, in the vast majority of cases, discover a swollen, red and tender nipple, and its cause is a fissure. As yet there may be no definite hardness of the gland—merely a fulness. Now if the fissure is not made to heal, and if the patient does not in some way evacuate the breast, the too familiar “cake-breast” is almost sure to result. The immediate effect of the fissure is to cause a swelling of the whole mamilla, with narrowing of the orifices of the lactiferous duct. This of itself causes an obstruction to the flow of milk. Milk will seldom escape from the human breast unless some form of suction is employed; merely squeezing the gland will not evacuate it of its contents. The patient is usually advised

by her physician to stop nursing from that breast, and he often tries (usually vainly) to arrest the secretion of milk by employing various liniments, etc. But the glandular vesicles continue to pour out their secretion; and there being a stasis of the flow, as a natural consequence the ampullæ and deeper ducts become filled with and dilated by milk. This increases to such a degree that the whole breast becomes uniformly swollen and tense. The patient has "cake-breast."

Very early in my practice I ceased using any drugs to arrest the secretion of the milk in such cases, and turned my attention to devising some means by which the gland could be emptied of its contents without at the same time injuring it. I think that only a very few of these cases will go on to the formation of abscess if we can do this.

I support the gland by means of a broad strip of adhesive plaster passing under it and across the chest and back to the opposite shoulder, but being careful to leave the nipple and areola exposed. Having washed the nipple with a weak sodii bicarbon. or sodii sulphur. solution (3j to f.3j), I search for the fissure. If I find one I apply the mitigated nitrate of silver stick, and repeat as often as indicated until healed.

The natural and best way to evacuate the gland is to let the child nurse. But we cannot let this be done in the ordinary way, because of the pain it causes the mother, and also because it would only make the fissure worse. To avoid this, I get a rubber nipple with a broad base (from two to three inches in breadth), and wetting it I apply it over the nipple. If the mother will hold that in place, we will find that the child will nurse through this and at the same time the fissured nipple has an opportunity to heal. But if the child will not nurse this way, we may use a breast-pump, contenting ourselves with removing but a small quantity of milk at each application.

In case we fail in all our efforts to prevent cellular inflammation in the substance of the gland, and its presence becomes manifest, I stop trying to draw off the milk and forbid the child's nursing from that breast; for its secretion becomes vitiated and often positively deleterious to the child.

The adhesive plaster still supporting the breast, I now begin the use of cold, wet cloths applied over the whole exposed portions of the breast, to limit as much as possible the area of inflammation. Just so soon as I find that at any spot the gland tissue is breaking down, I operate without waiting for "pointing." If we wait until the abscess shows signs of breaking spontaneously, our patient will have hectic, and in all probability the breast will be undermined by sinuses. Besides, I believe that nearly all the subglandular abscesses we see are due to the pus burrowing between the gland and muscles, having originated in the gland-tissue proper. Therefore, I say, operate as soon as we can—as soon as we can locate the pus. But whether we operate early or after the abscess has "pointed," I believe that there is but one correct way of doing so in the case of a single abscess. Usually drainage-tubes are employed in these cases; and should there be more than one abscess, or the abscess be subglandular, "through-and-through" drainage is employed. I believe that in the latter two conditions "through-and-through" drainage is the proper treatment.

But not so in the case of single abscesses, however large they may be. The old idea of the existence of a "pyogenic membrane" lining pus cavities, has stood very much in the way of the proper treatment of these cases. There is no such thing as a pyogenic membrane; that is, a membrane which secretes or pours out pus, except, possibly, in the case where a mucous membrane is the seat of a purulent inflammation. But a pyogenic membrane, as this term is usually applied, is a myth. Hence it is that I think abscesses can be placed in exactly the same condition as are cavities left after the removal of tumors. If small, they may be made to heal by first intention, provided the necrosed tissues about them are completely removed by a steel curette. But such a result is impossible in the case of a mammary abscess. Here we have a large gland which is the seat of an abscess, and is at the same time performing its physiological function of secreting milk. Mammary abscesses which have not been curetted, and into which drainage tubes have been placed, close very slowly; the resulting cicatrix is dense, and there is the im-

mediate danger of the formation of a troublesome lacteal fistula (I have seen it more than once), with the remote prospect of abscesses after the next confinement. It is a well known and simple anatomical truth that the lacteal ducts run in gradually converging and almost straight lines from the circumference of the centre of the gland.

Having found the spot where the necrotic process is most marked, I thrust my knife into it, taking care that the cut is *parallel* to the course of the lacteal ducts. Having evacuated the pus cavity, I introduce my finger to determine its size, and then extend my incision outwards and inwards until the limits of the cavity are reached, cutting in such a way that my incision is perfectly straight and parallel with the ducts. Then with Sims' steel curette, I thoroughly remove all the degenerated tissue lining the cavity. If there are sinuses, I curette them also. The wound is then irrigated with liquor hydrargyr. bichlorid. (1 to 2500), and the cavity and sinuses packed with sublimated gauze cut into small pieces and thoroughly impregnated with powdered iodoform. If the sinuses are very long, it may be necessary to make a counter-opening and introduce a drainage-tube; but this will *never* be necessary if we operate early. Only spouting arteries need tying, the pressure of the packing being sufficient to control all other bleeding. More gauze, cotton and the bandages complete the dressing. The first dressing may be allowed to remain on for from two to four days, as indicated. I prefer to change the dressings every two or three days. Every subsequent dressing is exactly like the first.

To sum up: To prevent mammary abscess, support the breast by adhesive plaster, cure the fissured nipple which nearly always exists, and empty the gland. To cure the abscess when it does occur, operate early—a free incision (from circumference to areola, if necessary), parallel with the course of the ducts; make use of the curette and of the gauze and iodoform. By using the former means in cases of "cake-breast," we will rarely see an abscess occur, and by operating in the manner indicated in case of abscess, we will cause them to close in the shortest possible time and with the least amount of attention on our part. At least we avoid lacteal

fistulæ, sinuses and relapses—things we often see after the old method of operating. In the gauze and iodoform, we have the best absorbents of the discharge and the most easily managed disinfectant.

38 East Thirty-third Street.

ART. II.—**Portsmouth and Her Floods of 1883 and 1884, from a Sanitary Point of View.*** By ED. S. RICKETTS, M. D., Member of the City Board of Health of Portsmouth, Ohio.

The time of the year, the state of the weather, and the depth and clearness of the water, all have a great deal to do with the naming of newly discovered rivers. Had the French pioneers and discoverers first beheld the Ohio under circumstances similar to those of February 1883-4, they might possibly have given it some other name than that of the "beautiful river."

This "beautiful river" at times lays aside her beauty and becomes a sullen, swollen, dirty-faced monster, and makes her way to the Mississippi on a regular "tear," sweeping across her fertile valleys, around and over her islands, and into and out of her cities, towns and villages.

During these floods, especially the one of 1884, many houses were swept away, and many were the inconveniences, and great were the financial losses caused thereby; yet nevertheless floods have proven to be "sanitary blessings in disguise" to some of the towns and cities situated on river banks.

In like manner, Europe has at different times considered her great plagues to be natural calamities, but by them that continent has been cleansed, and great has been the benefit derived thereafter from the necessarily improved sanitation.

During the time of the floods mentioned, the physicians of Portsmouth had an experience which was rich and full of humorous incidents. On their rounds of mercy and heal-

*Read before the Ohio State Sanitary Association, February 5th, 1885, at Columbus, O.

ing, in best high-water "bib and tucker"—which consisted of rubber hat, coat and boots—they were welcomed through the second-story windows of the houses of their patients and made as comfortable as circumstances would permit in these flood quarters. Think of a doctor making his calls in a "John-boat," which must take the place of his horse and buggy—he playing the part of the horse, not however in shafts, but pulling at the oars! Substitute boatmen could be hired, but were scarce, and two dollars per hour for one soon brought the physician to his own rescue. Attending obstetrical cases in the attic of some nicely furnished house, with from two to six feet of (rising) water on the first floor; the nurse coming to his aid at the dead hour of midnight after a rough boat voyage, was really to most of us a new experience, and to be the recipient of the numerous drenchings which befel the inexperienced medical mariner was certainly a novelty too cool to be enjoyable.

Portsmouth is ninety miles almost due south from Columbus, situated at the junction of the Ohio and Scioto rivers, the Ohio running from east to south by west, giving the southern border, and the Scioto running south to west, making the western border. The corporation is fan-shaped—the point of radiation being toward the north—and contains about fourteen hundred acres. From the point of radiation, along the bank of the Scioto to the southwestern point of the city, the distance is one mile. From this southwestern point a line drawn along the bank of the Ohio for two miles will give the southern border. From this point to the radial point the distance is one and one-half miles, making the eastern border.

The city itself is four hundred and seventy-four feet above high water. The soil has been made by the washings of the waters of the Ohio from the east and those of the Scioto from the north, and underlying the surface from twelve to twenty-five feet there is a strata of sand mixed with gravel which dips, as it were, under the two rivers named. All of the vaults of the city are down to this bed of sand and gravel, and those that are kept from puddling are drained in a satisfactory manner—the contents of these vaults rising and fall-

ing correspondingly with the stage of water in the rivers. The vault at the *Tribune* building is controlled especially by the Scioto river, its depth being forty-five feet, and during a recent sudden rise in the Scioto it filled up to within six feet of the surface of the ground—soon after dropping down to the depth of forty feet.

Such are the elegant proofs of the drainage facilities of this sand and gravel strata. Along the banks of the large water-courses during the low-water season numerous springs burst forth, adding much to the beauty and fertility of the surrounding country. The city is supplied with water from the Ohio by means of the "Holly system," and so thoroughly has the system been introduced, that inside of the corporation limits there are not more than six wells. The city has seventeen streets running from north to south, twenty running from east to west, twenty-five miles of brick gutters, and three miles of sewers.

When the late flood of 1883 came, it was predicted, by apparently excellent authority, that much sickness would be the inevitable result during the following Summer and Fall, but, to the delight of the people and the slight discomfort of the doctors, such result failed of accomplishment; but, however, when the flood of 1884 presented itself with five feet higher water than the one of the previous year, then the people generally thought that there could be no doubt but that the ensuing Summer and Fall would bring plenty of work for the medical profession. Great was the disappointment among the sons of *Æsculapius*, as that Summer and Fall proved to be healthier than many preceding seasons.

The deaths in Portsmouth, with a population of fourteen thousand (14,000), during the following years, have been:—

1878	173
1879	149
1880	181
1881	201
1882	179
1883	190
1884	147

Of the one hundred and forty-seven deaths in 1884, fifteen

died from consumption, nine from typhoid fever, seven from cancer, one from croup, and four from cholera infantum.

During the past eight years there have been four deaths from diphtheria and three from scarlet fever. Why it is that Portsmouth has been so free from diphtheria and scarlet fever is worthy of consideration. The resident physicians are not clear on this point.

The question has been asked many times, Why is it that the health of the city has been so good during the year 1884?

When one considers that the greatest depth of flood-water in the Ohio river was sixty-six feet and two inches (February 12th, 1884, 8 o'clock P. M.), and that the entire city was flooded, with the exception of a small strip of land on Sixth street, and that the water was high enough to lift the contents of many vaults to the surface of the ground, sweeping the substance along with the filth of the streets and alleys out into the Ohio and Scioto rivers; that all cellars and cisterns were overflowed, they having afterward to be drained, cleaned, and in many cases repaired; that a general scrubbing, scouring and cleansing had to be resorted to, and that new wall-paper went on to walls which the flood had relieved of a precious burden of from seven to ten layers; that new out-houses had to take the place of those old rickety ones that had gone on a journey towards the Gulf of Mexico; that the heavy deposit of sand and clay was a good sanitary agent—the surface of the streets and alleys being thoroughly scraped when this was carted away—and that the general health of Portsmouth for 1884 was better than for many previous years. I think all will coincide with me in the conclusion that the floods of 1883 and 1884—the latter especially—proved to be excellent sanitary measures.

Treatment of Malaria.—Dr. James Carter, of Omaha, in the *Proceedings of the Nebraska State Medical Society*, 1884, says: "Remarkable cures have been reported from the use of *decoction of lemons*. It is said to be equal to, if not better, than quinine."

ART. III.—**Intermittent Fever Simulating Cerebro-Spinal Fever.**
By J. GRAMMER, M. D., Halifax C. H., Va.

The relation of cerebro-spinal fever to the fevers of acknowledged malarial origin seems to have attracted some attention of late, and I trust that the history of the following case may help to throw some light upon the matter. It occurred within a few days after reading an article upon the subject by Dr. Wilson, of Philadelphia, in the *Medical News* of December 2d, 1882, and I was so struck by the coincidence that I took full and careful notes of the symptoms.

Dr. Wilson gives the history of two cases, one of which he designates "An intermittent variety of Cerebro-spinal Fever;" but the second he was unable to define, as he only saw it after the state of collapse had occurred, and was unable to obtain a satisfactory history. His bias seems to be towards a malarial origin. After dwelling upon the similarity between the epidemic and sporadic cases, which he says cannot be distinguished from each other, either at the bedside or on the post-mortem table, he goes on to say of the causes of these: "If they (*i. e.*, the causes) could be shown to be identical, the theory of a widely-distributed infecting principle (miasm), capable of a prolonged independent existence, and, under ordinary circumstances, of public-infecting power, would be alone tenable."

Now, I have never seen an epidemic of cerebro-spinal fever, nor very many sporadic cases; but our malarial fevers in this section of the State are so Protean in their symptoms and manifestations, and so often show some, and sometimes many, symptoms of the cerebro-spinal fever, that I find no difficulty in believing that the "infecting principle" of the latter, if not identical with, is very near akin to the malarial germ. We have here, almost every season, though not very numerous nor very severe, sometimes one and sometimes another of nearly all the types that malarial diseases can assume, and I have not unfrequently seen in the same neighborhoods, and sometimes in the same household, two or three different forms of malarial fever at the same time, or else following closely upon each other. Some of

the symptoms of cerebro-spinal trouble are not uncommon, as, for instance, pain in the back of the head, stiff neck, etc., though I have never seen them so numerous nor so pathognomonic as in the case I am about to relate. But a short time before this case occurred, I had felt constrained to differ with a brother physician, who had called me in consultation on a case which he pronounced cerebro-spinal fever, but which I felt assured was a bilious-remittent or continued fever, as it lacked too many of the distinctive symptoms of the other.

It is not more difficult to believe that the same poison, modified by different circumstances and conditions, objective and subjective, may produce in one case cerebro-spinal, and in another bilious-remittent, or continued fever, than that the same poison should produce sometimes simple intermittent, and again malignant remittent, or congestive fever.

I remember that, in my student days, our instructors used to caution us, and I believe the books teach it still, that wherever malarial diseases prevail, all other diseases are very likely to exhibit some of the characteristics of malarial infection; but I am inclined to the opinion that it is malaria putting on the similitude of the others. It is as bad as hysteria in its simulations and contradictions.

Only a few weeks ago I had apparently one of the worst cases of dysentery I ever saw, but the second day I was fortunate enough to detect its remittent character, and in less than a week the patient was well.

And now to my case:

Sunday, Dec. 10th, I was called to John W—, a strong and healthy man, but somewhat given to drink, age about 46. I saw him at 10 A. M. He had reached home from his work the night before, after a walk of ten miles, and took one drink on the way, feeling perfectly well, and not over-fatigued. He ate a hearty supper and went to sleep, but about midnight had a severe ague, which lasted an hour or two. As this went off, his neck and back became stiff; his head was drawn backwards, body arched upwards, legs stretched out with the heels together, and he complained of excruciating pain in the entire neck and back of the head. This was the account given by his mother and wife—the former a great authority on sickness among her neighbors.

How long the opisthotonos continued I could not learn, but when I saw him it was gone, although the head was still drawn backwards, and the neck was perfectly stiff. At times, they said, he had been talking a good deal "out of his head."

I found him lying on his back, in a somewhat stupid, somnolent condition, answering, however, promptly to my address, and talking clearly and sensibly enough, but reluctantly, and evidently preferring that his wife and mother should answer for him. His skin was tolerably cool, soft and moist, and his pulse barely 100. I did not take his temperature, nor examine his tongue, as the room was only lighted by a door, and the weather was so bad that I did not care to have it opened. He complained of pain in the back of his head, which he could neither bend nor turn, and more especially at the angle of the right jaw. There was tenderness over the whole neck; but over the right parotid gland, which was hard and swollen, the hyperæsthesia was so great that he could not bear the slightest touch. The left parotid was neither swollen nor tender, and I could not learn how long the right one had been so. He could swallow and talk without pain, and there was no hyperæsthesia elsewhere.

I was very much afraid I had a case of acute cerebro-spinal meningitis to contend with, but as the fever seemed to be going off, and general amelioration going on, I determined a compromise between that and an intermittent or remittent, and combine the treatment of both. Accordingly, I left him four half-grain doses of calomel with directions that one be taken every six hours, and a mixture containing, to the dose, ten grains each of potass. bromid. and chloral hydrat., and ten drops of ext. geleemin—a dose every two hours until he should go to sleep, or become entirely comfortable. I also applied an emplastr. cantharid. *around* the back of the head. I placed the blister around the neck, because I did not want to blister the surface immediately over the spinal cord any more than was absolutely necessary in order to keep the blister on its sides in place.

During a service of eighteen months in Randall's Hospital, New York, I often found, on post-mortem examination, that a blister over the spine left its mark very distinctly, in an increased congestion of the cord or its membranes, immediately under the blister, and accordingly I have always been as cautious, especially in acute diseases, in blistering the spine as I would the head.

Dec. 11th, 11 A. M., I found patient entirely comfortable, free from pain, tongue clean, pulse full and natural, skin soft and moist, no headache, no stiffness nor pain in the neck, hyperæsthesia gone, and only slight enlargement, hardness and tenderness of the parotid. He had talked a little "out of his head," they told me, the evening before, but had slept soundly all night, and had eaten an egg, some bread and a cup of coffee for breakfast, and wanted more. The blister had drawn well, but was not painful, and the bowels had moved freely twice during the early morning. He complained of a symptom that I had not inquired into the day before—of some dimness of vision, or "blariness," as he called it, and the pupils were somewhat dilated, and sluggish to the stimulus of light.

Being now pretty thoroughly satisfied that the attack was an intermitent fever, and fearing another attack that night, I left him twenty-four grains cinchonidia sulphate, to be taken in four-grain doses every two hours till midnight. Being obliged to leave home the next day, for an absence of several days, I directed, if he should have another paroxysm that night, that another doctor should be sent for, leaving a note for him with my views of the case and treatment. But if he should have no return, he was to take 20 grains of cinchonidia every day for several days. On my return I learned that he had left home on Thursday for his work, having progressed steadily after I left him.

Although it of course is not certain, I have very little doubt that this patient would have had another chill Monday night, but for the 24 grains of cinchonidia, and if I could have remained to watch it, I could almost wish that I had allowed a second chill to occur in order to have made the matter sure.

Now here was to all appearance an undoubted case of intermitent fever, with all the pathognomonic symptoms of cerebro-spinal fever. Whether my prescription for the latter was of any essential benefit, it is impossible to say, but it can hardly be doubted that the cure was due to the treatment for intermitent. Of this I am satisfied, that there is some relationship between the two diseases, and I hope that this case may assist some one more competent than myself to trace it. I vouch for the perfect correctness of the history.

ART. IV.—**Note Concerning Bovine Virus.** By W. THORNTON PARKER, M. D., Atlantic City, New Jersey.

In the *New York Medical Record* of February 21st (1885), is a communication from Dr. Doughty, of Atlanta, Ga., concerning his experience with *Bovine Virus* in the vaccination of children. The Doctor states that, "On December 7th, I received five points of bovine lymph from the New England Vaccine Company. Ten cases were vaccinated with this bovine lymph—one normal and one in which on the 13th day he found a slough involving the entire thickness of the skin and cellular tissue beneath, about the size of a quarter dollar, with abundant suppuration."

We have had a large experience for the past three years with this same bovine lymph from the New England Vaccine Company. Considerable quantities of it are furnished to the Chief Medical Purveyor of the United States Army, who is very particular in securing the best lymph obtainable. We have been informed that at one post a soldier was in *considerable danger* after vaccination with this lymph, and in about *two hundred cases*, we have had one case with symptoms similar to the one Dr. Doughty has reported. The patient, a white soldier, was excused from duty for several days, and for two or three days was confined to his bed. The arm was treated by the application of boro-glyceride, five per cent solution, and recovered rapidly under the use of this antiseptic.

"*If properly performed,*" vaccination with *Bovine* lymph will always be found superior to *humanized virus*, and in every way more desirable. In our experience the lymph furnished by the New England Vaccine Company is excellent and trustworthy, and we know of no better in the market at present. It is not the *lymph* which is to be blamed for these severe cases now and then presenting themselves, but the system of the patient. In our practice one severe case in two hundred or more is not remarkable, and the experience of Dr. Doughty with unfavorable results in fifty per cent. of his cases is merely accidental. If the Doctor will try again, we believe he will have better luck, and so far as humanized

virus is concerned, we beg to refer him to the *Philadelphia Medical Times*, March 7th, 1885, article, translation concerning "Variola," from the *Revue de Medicine*, November, 1881.

Analyses, Selections, etc.

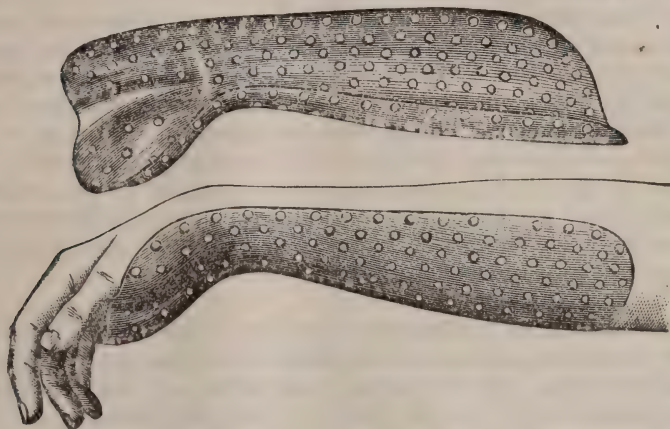
Levis' Metallic Splints, for Fracture of Lower End of the Radius.—We take the following description from an article by R. J. Levis, M. D., Surgeon to the Pennsylvania Hospital, and to the Jefferson College Hospital:

"In the usual and very characteristic fracture of the carpal end of the radius the primary line of the fracture is, with little tendency to deviation, *transverse* in direction. Associated lines of fracture are generally those of comminution of the lower fragment, and are caused by the upper fragment being driven vertically into it and splitting it, usually in directions towards its articular surface. The displacement of the lower fragment is towards the dorsal aspect of the forearm, and its articular surface is inclined in the same direction, abnormally presenting backwards and upwards.

"The mechanism of the fracture is its production by falls upon the palm of the hand, which, with the carpus, undergoes extreme extension, and the fracture is caused by an *act of leverage* or *transverse strain*. This direction of force has also been called *cross-breaking strain*. In this fracture actual displacement of the lower fragment may not exist at all, or it may be to the extent of complete separation from contact of the broken surfaces, varying with the amount of force applied and with the retaining influence of the surrounding dense structures.

"The first essential of the treatment of fracture of the lower end of the radius is *the complete reduction of the displacement*. The action of replacement must be directed to the lower fragment itself. The reduction of the fracture can usually be thoroughly effected, under anæsthesia, by *strong extension applied to the hand, associated with forced flexion of the wrist, and with pressure applied directly on the dorsal surface of the lower fragment*. Unless vertical splitting or comminution of the lower fragments exists, the maintaining of partial flexion of the wrist, with pressure of a pad on the dorsal surface of the fragment, will prevent return of deformity.

"With the object of retaining the apposition of the fractured surfaces by overcoming displacing forces, I have practiced for many years on the principles involved in the splint



here illustrated, the application of which will not require much description.

"In the treatment of fracture of the lower end of the radius it is essential that proper allowance be made for the curvature of the anterior or palmar surface of this part of the bone. This is insured in the splint which I have devised, which follows correctly the radial curvature; and the fixing of the thenar and hypothenar eminences of the hand in their moulded beds maintains the splint immovably in its correct position with reference to the radial curve. To neglect of complete primary reduction of the displacement of the lower fragment, and to inefficient restoration and retention of the normal radial curve, are due the frequent unfortunate sequences of this fracture.

"The splint is made of copper, so as to be readily conformable by bending to suit the peculiarities of size and form of forearms. The slight roughness left on back of splint from perforations is for the purpose of keeping the bandage from slipping. It is nickel-plated to prevent oxidation.

"The splint will usually fit the forearm so accurately that but little padding will be required, and a piece of woven lint, or of cotton or woollen flannel is all that is necessary for its lining. No dorsal splint is needed, but, as before referred to, a small pad will in most cases be required over the dorsal surface of the lower fragment. For retention of the splint

an ordinary bandage, two inches and a half to three inches wide, is all that is necessary.

"This splint has the merits of being applicable to all cases of fracture of the lower end of the radius, and also to many other injuries involving the forearm and wrist, and, as now supplied, is very inexpensive," the price being only one dollar for each piece. The splints are made in two sizes—for adults and children—and also to fit the right or left arm. As made by Mr. J. Ellwood Lee, of Conshohocken, Pa., (whose electrotypes we have borrowed for the above illustrations,) the splints are flexible, perforated and nickel-plated, and are very light and indestructible.

Contagiousness of Cholera.—In view of the special interest now attaching to the subject of infectious diseases, and especially cholera, the following translation by Dr. William Thornton Parker, now of Atlantic City, New Jersey, will be read with profit, as adding to the historical information.

Professor von Gietl, of Munich, published in 1835 some very valuable observations concerning epidemic cholera.* These observations on the development of the cholera in the civil and military hospital at Breslaw, in the year 1831, led the learned Professor to the opinion that the bowel contents contained the infection, and that this was the medium of the propagation of the disease. He concluded from his experiment that the body and the corpse of the cholera patient are not in themselves infectious. His observations made subsequently confirmed him in this opinion.

The researches concerning the spreading of typhoid fever in the years 1839 and 1840, convinced him with equal certainty that that disease extended under similar circumstances as the cholera.

In the fall of the year of 1831 the first case of cholera was received into the General Hospital at Breslaw. The cholera patient was brought into a ward in which were eight fever and chronic patients. In eighteen hours the cholera patient died. Afterwards, within five days, five of the patients died of cholera, and the washerwoman who washed the clothing of the cholera patient also perished. The three hospital attendants, although seriously ill with cholera from this exposure, were saved. In the Military Hospital an officer died of cholera. The officer's dog was seen to devour some of the contents of the chamber-pot. Two days later the dog

* Die Cholera nach Beobachtungen auf der I Med. Klinik und Abtheilung in Städtischen Hospital Jn. Munchen von Prof. Fr. X. von Gietl, Munchen, 1855.

was attacked with cholera and died. A post mortem examination was made of the bowels of the dog, and they presented the same appearance found in the human being dead from cholera. With these experiences fresh in mind the Professor entered upon a course of investigation of the cholera epidemic of 1854, and found therein satisfactory evidence to confirm his former theories in the course of this epidemic also.

After Treatment of Tracheotomy Cases.—Henry J. Reynolds, M. D., of Orion, Mich., in the *Transactions* of his State Medical Society for 1882, gives some practical remarks on this subject which cannot be too much emphasized.

While the operation of tracheotomy in a successful case is one of the greatest of blessings that can be bestowed upon man by human agency, it is nevertheless a comparatively simple one, and one that may be performed by a moderately skillful operator with little or no great danger; but there are a great many very important points to be considered beyond the simple operation, which undoubtedly of itself produces great *temporary* relief, and considered collectively, have everything to do with the permanent result.

The after treatment may be summed up under four principal heads, to carry out which properly and thoroughly involves nothing short of *the constant attendance of the operator or a thoroughly competent assistant.*

1st. The continuation of the treatment of the original affection giving rise to the obstruction.

2d. The management of lung and bronchial complications, and the getting rid of the secretion therefrom.

3d. That pertaining to a difficulty which the patients frequently encounter in performing the act of deglutition.

4th. To the condition of the wound and the final removal of the canula.

(1) When tracheotomy is performed, immediate relief is generally afforded. A continuance of the treatment for the affection giving rise to the obstruction should be followed up as thoroughly, if not more so, as it was previous to the operation. If the patient be sufficiently manageable, it is very important that some efforts be made at respiration through the natural passage, and as much steam be inhaled into the larynx as possible. This may be carried out the more effectually by occasionally placing the finger upon the external opening of the tube during inspiratory efforts.

(2) After the operation, sooner or later, there seems to be

a tendency to a complication of bronchial and lung troubles. It is true that in cases where the obstruction is due to croup or diphtheria there is liable to be an already existing bronchial trouble, but it invariably seems to be aggravated by the operation. This is probably partly due to the irritation of the wound and tube in the trachea, and largely to the condition of the inspired air. The patient should, immediately after the operation, be placed in a very *warm, moist* atmosphere, say in a room with temperature ranging from 85° to 90° F., in which an abundance of steam is being generated, so that the condition of the air on entering the lung may be as near that obtained through the normal passage as possible, with, however, more moisture. I have been in the habit of having the patient inhale steam, either medicated or not, directly from an atomizer, at very frequent intervals, and of keeping the atomizer constantly going as near the patient as possible.

It is very essential with a view to the best management of a case after the operation that the proper tube be made use of in the first place, as it not infrequently happens that the insertion of a different tube is found necessary during the after-treatment. As large a tube as possible should be made use of. It produces no more irritation, and possibly not as much as the smaller ones, and gives a more abundant supply of fresh air with much less labor and physical strain in the performance of respiration, an item of the utmost importance to a patient when the powers of endurance are already nearly exhausted. A *small* canula will undoubtedly afford immediate *temporary* relief, but *any* size smaller than the natural passage of course involves greater physical strain to carry on the respiratory function. The long part or tube proper should be separate from and moveable upon the flat outside part or shield, so that the movement of the neck may not necessitate the movement of the part within the trachea, thereby avoiding abrasion of the mucous membrane. There should also be corresponding openings in the upper or convex surfaces of both the stationary and separable tubes, so that free breathing may be carried on through the lungs, when possible and advisable, without the removal of either tube. A no less important reason why a large sized canula should be used, however, is that the bronchial secretion may be more easily and effectually gotten rid of, and that it may be done with less danger of clogging up of the tube. This in cases of croup and diphtheria, where there is fair vitality left at the time of operation, is the greatest obstacle in the

way of a successful result, and the one which more particularly necessitates "the constant attendance of the operator or a thoroughly competent assistant" during the after-treatment of tracheotomy cases.

(3) Patients who have been operated upon for the relief of laryngeal obstruction frequently experience a difficulty in swallowing. This is especially the case where the obstruction is due to diphtheria, and usually takes place within a few days after the operation. We frequently, indeed, find this condition as a result of diphtheria where *no* operation has been made. It may be accounted for in several ways. In the first place, diphtheria *per se* has a sort of constitutional tendency to produce at times a paralytic condition in different parts of the body; in the second place, the false membrane, if any, acts more or less as a *mechanical* impediment to the action of the muscles, in and around the larynx, concerned in the act of deglutition; in the third place, there being so much soreness in the larynx, pharynx, and throat generally, patients affected thus, involuntarily, as it were, refuse to allow the muscles involved in the act of deglutition to perform their function—their *dread of pain*, caused by the act, being greater than and overbalancing their *desire to have* the act performed. Just the same condition we find in acute knee-joint disease; there is no paralysis of the flexor or extensor muscles of the leg, but the dread of pain is so great that the person so affected has not got will power sufficient to overbalance it, and hence can neither flex nor extend the leg. It is also quite probable that the presence of the tube and the consequent soreness around it so impede the ascension of the larynx as to somewhat interfere with the proper performance of the act. This difficulty in swallowing is rarely so great, however, as to materially affect the case if otherwise favorable. A semi-solid diet seems to be best adapted to such cases, and more easily swallowed than either liquids or solids. It has been recommended that the patient, if possible, place the finger upon the opening in the tube and make an effort at breathing through the larynx when about to swallow, that the difficulty might thereby be overcome by producing as it were a sort of harmony between the acts of respiration and deglutition. Later experience, however, has conclusively shown that this manœuvre is not always beneficial.

(4) Before removing the tube the patient's breathing capacity should be thoroughly tested, and he should be allowed to attempt respiration through the larynx with the tube

closed by means of a plug. There appears to be a greater tendency to dyspnœa during sleep, and the patient should, in short, be carefully and thoroughly watched day and night from the very time of operation until all such symptoms, even while the orifice of the tube is closed, have subsided. The tube should then be removed without further delay, so as to avoid any further liability to irritation from its continuance.

Little need be said of the treatment of the wound, more than that during the continuance of the tube the parts around it should be kept cleansed and healthy. Excessive granulations should be touched with nitrate of silver or other caustic, and if considered really essential to the best management of it the tube may be removed while the wound is treated and be again reinserted. After the *final* removal of the tube the opening should be kept drawn together with plasters and simple dressing until fully cicatrized.

Relation of Insanity to Gout.—Dr. H. C. Wood, of Philadelphia, in some remarks before the College of Physicians of Philadelphia, November 5, 1884, upon a case of "Chronic Contracted Kidney with Normal Urine, including Acute Gouty Dementia, with a Perforating Recto-Vaginal Ulcer, and Death from Sudden Pulmonic Edema," says:

It seems to me well established that gout is capable of causing almost every form of insanity; indeed, insanity is only an increase of the mental conditions frequently seen in lithæmia. Carrol in 1859 said, "gouty mania is occasionally seen," and in 1875 Dr. P. Berthier (*Des Nevroses Diathésiques*, Paris,) published a collection of 46 cases of nervous disease attributable to gout: 1, hallucinations; 1, migraine; 4, tetanus; 3, chorea; 1, hypochondria; 7, epilepsy; 1, paralysis; and 26 of mental affection, including in these dementia, melancholia with stupor, mania. Although in some of these cases the evidence is not at all positive that gout was the *materies morbi*, yet in others the relation seems to have been clearly made out.

In his paper before the International Congress of London, (vol. iii., 640,) Dr. Raynor supported the following conclusions:

1. Protracted gouty toxæmia, when not very intense, usually results in sensory hallucinations or melancholia.
2. Sudden and intense toxæmia results in mania or epilepsy.
3. Intense and protracted toxæmia usually results in general paralysis.

4. If there be a tendency to vascular degeneration from plumbism, alcoholism, etc., varying degrees of dementia are produced.

In the discussion which followed the reading of Dr. Raynor's paper, Drs. Savage and Crichton Browne, of London, both expressed the belief that gout does cause insanity—the latter, however, qualifying by the statement, only where there is hereditary predisposition to insanity. Further proof of the connection between gout and insanity may be found in the Paris Thesis of M. Belliard (1882, No. 269), in which are detailed various cases.

The facts that in Mrs. L. [the case that Dr. Wood reports in detail as the basis of his remarks] the attack was at the time when an explosion of gout was to be expected; that in all her previous attacks mental depression was a distinct feature; that her urine was loaded with lithiates, although she was taking very little food, and that there was widespread, exquisite tenderness and soreness to movement, with febrile reaction, appear to establish a gouty etiology. The contraction of the lumen of the basilar arteries was seemingly sufficient to check the freedom of blood supply to the brain. Brain anæmia certainly existed, as was proven by the autopsy, and no doubt it aided in causing mental weakness. It is certainly worthy of remark, as confirmatory of the generalizations made by Dr. Raynor, that the type of mental disturbance exactly corresponded with his conclusions. There was a pronounced tendency to vascular degenerations, and the mental disturbance partook of the nature of dementia.

Sudden Pulmonary Congestion and Œdema, associated with Vaso-Motor Weakness.—Dr. Edward T. B. Bruen, of Philadelphia, read a paper before the College of Physicians of Philadelphia, December 3, 1884, on "Some Cases of Disturbance of the Normal Vaso-Motor Tonus," from which we condense the following abstract:

The best illustration is found in acute œdema of the lungs in subjects of chronic alcoholism. In these cases, œdema may develop in a few hours, attributable to the effect of alcohol on the vaso-motor system.

Alcoholic pulmonary œdema differs from the secondary hydræmic œdema of Bright's disease, scorbutus, purpura, anæmia, etc., because alcoholic subjects are not always anæmic. Alcoholic pulmonary œdema may exist independently of organic heart disease, or inflammatory processes in the lungs, such as pneumonia, capillary bronchitis, miliary tuber-

culosis, etc. He then presents cases representing pulmonary congestion and œdema from vaso-motor paresis analogous to cases of alcoholic pulmonary œdema, and similar to those cases which occur from deficient vascular tonus from pressure on the vagus or the pulmonary plexus. Similar forms of œdema occur in acute general diseases, such as typhoid, typhus, and scarlet fevers, associated with feeble heart-action. Pulmonary œdema from lowered vaso-motor tonus occurs in the aged or feeble, and is associated with catarrhal swelling of the bronchial mucous membrane. Some cases of pulmonary congestion with œdema, however, occur suddenly, and in young, previously healthy persons, who are not directly subject to any of the above predisposing causes.

It is important to connect with the vaso-motor system instances of pulmonary congestion occurring in elderly persons with feeble hearts, but without sufficiently serious valvular disease or degeneration of the heart to quite account for the symptoms. The treatment in these latter cases should be rather a general treatment by hygiene and tonics, than by directly treating the heart, which may be only secondarily responsible. Digitalis is not so useful as a cardiac stimulant, possibly, because it affects the heart too positively before the vaso-motor system is sufficiently acted upon. Indeed, the vaso-motor effect of digitalis may be absent when the action upon the cardiac muscle is decided. I am aware that recently it has been asserted that digitalis possesses a predominant action upon the vaso-motor system.

Naturally the vaso-motor derangement in Graves' disease suggests itself in this connection. The disease, as is well known, is characterized by the association of symptoms connected with the heart, thyroid gland, and eyeball. The phenomena of Graves' disease illustrate the extreme susceptibility of the vaso-motor system to exciting causes, since the typical features of the disease are markedly increased at the menstrual period or during sudden emotional excitement. In the Philadelphia Hospital was a case of Graves' disease almost convalescent. The subject was so much excited by the unlooked-for death of his fellow-patient that almost immediately the entire series of symptoms of thyroid enlargement, exophthalmos, and cardiac palpitation reappeared.

In the *treatment* of vaso-motor dropsy, absorption of fluid from the tissues, like its exudation into them, is probably greatly controlled by the central nervous system. Goltz found that when fluid was injected under the skin of the back of a frog it was rapidly absorbed so long as the brain

and spinal cord were uninjured, but when these were destroyed little or no absorption took place. Physiologically, absorption is under the influence of nerve-centres; therefore stimulation of these centres will increase their physiological functions. Stimulation of a sensory nerve is capable of inducing contraction of the entire vaso-motor system, and Nasse has proved that similar irritation will increase absorption.

Strychnia, digitalis, ergot, iron and zinc are capable of special impression upon the vaso-motor system, and these drugs are the chief agents with which to combat vaso-motor forms of dropsy. Special diuretics may be used as adjuvants in grave cases, but never to the exclusion of the former.

In cases of vaso-motor paresis associated with cardiac palpitation, and other phenomena similar to those seen in Graves' disease, the use of the bromides should be condemned. When vaso-motor dropsy is extensive, agents which stimulate the functions of the skin may be employed, and cardiac stimulants may be indispensable.

In the vaso-motor paresis associated with more or less pulmonary congestion and œdema, signal benefit has resulted from the liberal use of strychnia and atropia, by the mouth or by hypodermic injection. Strychnia by its action as a respiratory stimulant aids in thoroughly oxygenating the blood, and thus promotes the efficiency of the circulation. But it acts not only on the dominant vaso-motor centre, but also on the vaso-motor centres distributed through the cord. These centres (to quote Lauder Brunton's words) are so feebly developed as not to heed ordinary stimulation, but can be aroused by the use of strychnia to lend their aid to increase the vascular tonus. This truth has also been proven by experiment, for after section of the spinal cord, which of course paralyses the vaso-motor centres, the blood pressure can be made to rise by irritation of a sensory nerve. The combination of atropia with strychnia unites the action of two powerful remedies in urgent cases, and together with cupping, these medicines anticipate the slower action of digitalis.

In cases of pulmonary congestion with degeneration of the heart, and vaso-motor weakness, with or without valvular disease, the association of strychnia with some pure cardiac stimulant, such as alcohol, is frequently superior to digitalis, because this latter drug seems at times to produce an unfavorable effect. This unfavorable effect, well established clinically, is difficult to explain, except that the stimulant

action upon the heart and pneumogæstrics, slowing and steadying the heart, is not associated with corresponding vaso-motor stimulation, and the pulmonary repletion persists. Again, in valvular heart disease the lesion may be so great that two powerful systoles tend to increase pulmonary congestion by forcing the blood in two directions. Thus, the expression that digitalis depresses the heart is sometimes used, and practically such patients are better off without this drug.

Book Notices, &c.

The Year-Book of Treatment for 1884. A Critical Review for Practitioners of Medicine and Surgery. Philadelphia: Lea Brothers & Co. 1881. 12mo., pp. 316. Cloth. Price \$1.25. (By mail from Publishers.)

This neatly-bound little volume is, to a very great extent, all that its title implies—in other words, its contents are really valuable to the practitioner as a review of the best treatment introduced to his notice in the literature of the past year. Few general practitioners can afford the time and means (especially the first) to keep up with the different medical publications of the day, and it is to those who much desire to perform that task that this volume will be particularly welcome. It is a complete account of the more important advances made in the treatment of disease, and something more. Full reference has been given to every authority quoted, that the reader may verify the statement made for his own satisfaction, or follow the subject further; and extreme pains have been taken to clearly explain in the fewest possible words the views of each writer, and the details of each subject. Every doctor desires to obtain the best treatment for his patient—once assured of the correctness of his diagnosis—and this book gives to him almost the benefit of a consultation on that point with the authorities named. Especially, we think, is the work valuable in reference to the more common disorders of the human body, such as constipation, sprain, abscess, diarrhoea, etc., and in that department of surgery relating to wounds. It is the ordinary diseases and injuries of life that the average physician is called upon to treat, and anything helping him in their treatment will receive his praise. One of the principal points about this book to be commended is its practical yet concise language. Each editor has well performed his duty, and al-

though we could wish there was more pertaining to medicine and surgery in America between its covers, yet we can say with truth that it is a volume well worth buying for frequent use. C.

Practical Treatise on Diseases in Children. By EUSTACE SMITH, M. D., F. R. C. P., Physician to East London Children's Hospital, etc. New York: Wm. Wood & Co. 1884. 8vo. Cloth. Pp. 844. Price —. (For sale by West, Johnston & Co., Richmond, Va.)

Notwithstanding the number of manuals relating to the diseases of children already presented to the profession, the author has, in this work, given us a book worth reading and preserving for reference. In his Preface he is modest, but we think he has accomplished his task with far more ability than he seems willing to credit himself with. His practical experience of twenty years in pediatrics has given him the power, not only to write understandingly, but with wisdom, and the result is plainly apparent in this treatise. We should judge that Dr. Eustace Smith has taken pains to cover more ground in children's diseases—that is, include more of the disorders not necessarily dependent upon an infantile age, and yet those which we frequently meet with in private practice—than most writers upon the subject, and for that reason he deserves the more praise. It is idle to look upon a disease occurring in the freshness of early manhood and in a child under the age of puberty, as following the same course. There will always invariably be a perceptible distinction in some one or other of the symptoms. The author, in this book, puts the practitioner on his guard on this very question, and his views and advice are marked not only by the conservatism derived from an extended hospital and private practice, but also by the proper boldness of a man who feels sure of the ground he treads upon. That is one of the points which shows the value of this work, and it is only one of many. We see a great deal in it to admire; and if we are not mistaken, the writer will always rank as an authority. Dr. Smith lays great stress upon the important point, that it is not always the therapeutical treatment which most benefits a child in disease, but correct judgment in feeding, and proper sanitary management of the case. It is a wise knowledge of these last two things which makes the reputation of the successful practitioner among children. The author presents the axiom that, in infantile disorders, "the details of nursing should always take precedence of those of drug-giving," and we doubt if its truth can be questioned. His

style is clear and simple, and that, combined with the practical value of the matter of the book, will certainly place it in rank with our best works on diseases of children. C.

The Principles and Practice of Midwifery, with some of the Diseases of Women. By ALEXANDER MILNE, M. D., Ex-Vice President of Edinburgh Obstetrical Society, etc. Illustrated with numerous Wood Engravings. Second Edition. New York and London: Bermingham & Co. 1884. 12mo., pp. 371. Cloth. Price \$2.00. (For sale by West, Johnston & Co., Richmond, Va.)

The author of this book thinks that notwithstanding the number of excellent works now before the profession devoted to general obstetrics, he can fill a place before unsupplied. He believes that many principles and rules which he has found of great service in his own practice, and which are either ignored, or mentioned to be condemned, in most of the works referred to, should be more favorably presented to the medical public, especially some having reference mainly to the management of the second and third stages of labor. He is a firm believer in the doctrine of limiting as much as possible the duration of the second stage, and in his book has energetically brought forward his ideas upon this subject. The ground occupied by the subject of Diseases of Women, he only covers in this volume, as far as they are connected with the puerperal condition. A period of seven years elapsing between the preparation of the first, and this edition of the book, has enabled the author to more strongly reinforce some of his points, and to change the verbiage of certain portions of the book. While not agreeing fully with the belief that there is much need for an addition to the number of text-books on midwifery, yet we can see a great deal in Dr. Milne's book to admire, and must consider it an excellent number of "Bermingham's Medical Library." We must confess to a liking for Dr. Milne, because of his evident high appreciation of the work and theories of our lamented Marion Sims. C.

A Manual of Diseases of the Throat and Nose, including the Pharynx, Larynx, Trachea, Oesophagus, Nose, and Naso-Pharynx. By MORRELL MACKENZIE, M. D., London, Consulting Physician to the London Hospital for Diseases of the Throat, etc. Vol. II., Diseases of the Oesophagus, Nose, and Naso-Pharynx. New York: William Wood & Co. 1884. 8vo. Pp. 400. (For sale by West, Johnston & Co., Richmond, Va.)

The August, 1884, number of "Wood's Library of Medi-

cal Authors" completes the celebrated work of Mackenzie—a work which will probably long survive the talented author. A book which has taken every moment of the spare time of a busy physician, with the ability and reputation of one of the first specialists of his day, for twelve years, can not help but be worth possessing. Even full as the volume before us is, the author makes apology for its issue without at least a chapter on Diseases of the Neck. He promises, however, to have that division appear shortly in separate form. Everything that Mackenzie writes is deserving of careful examination, but after reading this second volume we are inclined to the opinion that it is even superior to the first. Beyond the information given—the summing up of his large experience—the charm of his style is so great that, to read his book is like reading one from the pen of some popular novelist. For a work devoted to the specialty above referred to, there is nothing to be found on the shelves of any publisher which we think can compare in value with the one written by this specialist of specialists—Mackenzie. C.

A Text-Book of Pathological Anatomy and Pathogenesis. By ERNST ZIEGLER, Professor of Pathological Anatomy in the University of Tübingen. Translated and edited for English students by DONALD MACALLISTER, M. A., M. B., M. R. C. P., Fellow and Member of St. John's College, Cambridge. Part II—Special Pathological Anatomy—Sections I-VIII. New York: Wm. Wood & Co. 8vo. Pp. 365. (For sale by West, Johnston & Co., Richmond, Va.)

The September No., 1884, of Wood's Library of Standard Medical Authors is, as we have before said of the first part of the same book, excellent in its way. To those whose studies lead them in the direction of pathological anatomy, these two volumes must commend themselves, and we see considerable matter which will be readily appreciated by any general practitioner. Nevertheless the latter, unless an active student—as all doctors should be, and so many are not—will not be likely to take a deep interest in the book. We dislike using such an expression, as it seems casting a slur on certain members of the profession, which we do not mean, but we do know that in the busy life, say, of a country doctor, he has neither time nor (generally) inclination for the necessarily careful perusal of this book required. To those physicians who can in any way spare the time, it is needless for us to recommend the fascinating study of pathological anatomy, as we have long been forestalled, but even to them we can recommend Ziegler as an authority much quoted, and

rarely overthrown, either in his theory or in the apparent results of his practical work. C.

PAMPHLETS, REPRINTS, ETC., RECEIVED, for which we have no room for fuller notice, etc.; but most of which can be obtained by enclosing a letter-stamp for pamphlet to the respective authors named.

Catarrhal Mucous Membrane. By P. W. LOGAN, M. D., Knoxville, Tenn. 8vo. Pp. 10. [This reprint from the *South-ern Practitioner*, January 1885, of a paper read before the American Rhinological Association, at St. Louis, 1884, attracted much attention because of its practical value. We would be glad if our subscribers generally would read it, as it refers to many circumstances and facts which, if remembered when treating patients with diseases of the catarrhal mucous membrane, would greatly assist them.]

Influence of Lung Retractivity in Pleurisy and Pneumo-Thorax. By F. DONALDSON, M. D., Clinical Professor of Diseases of Throat and Chest, University of Maryland, etc., Baltimore. [This reprint of fifteen pages from the *Transactions of the Medical and Chirurgical Faculty of Maryland*, 1884, furnishes some facts which aid in the differential diagnosis of pleurisy and pneumo-thorax, assist in estimating the quantity of fluid in the pleuritic cavity, and furnish indications as to the advisability of thoracentesis.]

Aphonia due to Chronic Alcoholism. By ETHELBERT CARROLL MORGAN, A. B., M. D., Washington, D. C. [A reprint from the *Journal of the American Medical Association*, December 6, 1884, of a paper read before the Section of Ophthalmology, Otology and Laryngology of the American Medical Association, May, 1884, which very forcibly impresses the fact that chronic alcoholism may produce aphonia or paralysis of the lateral crico-arytenoid muscles.]

The Induction Coil. By A. D. ROCKWELL, A. M., M. D., New York. [This reprint of twelve small pages from the *Medical Record*, November 8, 1884, describes and furnishes wood-cut illustrations of some varieties of the instrument, and concisely points out the differential indications for their use.]

Potassium Permanganate: Its Action and Uses. By ROBERTS BARTHOLOW, M. D., LL. D., of Philadelphia. [The title of this reprint from the *Medical News*, November 22, 1884, from this renowned author, tells at once its scope. The facts narrated have ample authority for their absolute correctness.]

Editorial.

Special Offer for New Subscribers to Annual Volume XII.—Any *new* annual subscriber to Volume XII. who remits three dollars for his own, and three dollars for the annual subscription of some friend not now a subscriber—total, six dollars—will receive as a premium one of *Barry's Clinical Thermometers*, which has just been patented, and which has already gained special popularity among physicians; or three of the celebrated *Dr. Farr's Improved Flexible Ring Pessaries*, any size desired, from two to three and a half inches outside diameter.

This offer is also open to any present subscriber who remits six dollars for *two new* annual subscribers. This offer is not to be held open after June 1, 1885.

The twelfth annual volume of the *Virginia Medical Monthly* is to begin with the April No., 1885. No better time offers itself to begin subscription than with the April No., 1885.

Robert Koch and His Achievements.—The April No. of the *Journal of Comparative Medicine and Surgery* will contain an article, by Professor Albert Johné, of the Royal Veterinary Institute at Dresden, embodying a sketch of Dr. Koch's career and a very satisfactory exposition of the main features in his methods of studying bacteriology.

It seems that Koch was born at Clausthal, in the Hartz mountains, in 1843, and studied medicine in Göttingen and Berlin from 1862 to 1866. In the summer of the latter year he acted as an assistant in the General Hospital of the city of Hamburg, and soon afterward he began the career of a general practitioner, which he followed in several small places in the vicinity of Hanover and in Posen. In 1872 he was appointed *Kreis-Physikus* for the city of Wallstein, in Posen, and it was there, we are told, that he laid the foundation of his course of researches while busily engaged in a practice that was constantly increasing and was largely surgical. At that time he made his remarkable studies of the ætiology of anthrax and the life-history of the *Bacillus anthracis*. He next turned his attention to the study of the morbid states due to infection from wounds, as recorded in the work entitled "Die Aetiologie der Wundinfektionskrankheiten," published

in Leipsic in 1876, in which he confirmed the observations made by Klebs, von Recklinghausen, Waldeyer, and Birch-Hirschfeld with reference to micrococci in connection with pyæmia and puerperal fever, pyæmia in the rabbit, and other diseases of traumatic origin in the lower animals, including an affection that became somewhat noted as the result of his researches—septicæmia in the mouse. He proved by direct experiment, says Professor Johne, that all these diseases were due to the introduction of micrococci into the organism, thus furnishing positive scientific proof of the conclusions that Lister had already drawn from and supported by practical experience. The attention of the Government, and of the medical profession throughout the world, having now been drawn to the humble *Kreis-Physikus* of Wallstein, he was promoted, in 1879, to the dignity of *Physikus*, and he then removed to Breslau. But he does not seem to have been suited at Breslau, for he soon went back to Wallstein, to remain for only a short time, however. In 1880 he was made a member of the Imperial Board of Health, and with his labors in that station the “Mittheilungen des kaiserlichen Gesundheitsamtes” have made the world familiar.—*New York Medical Journal*, March 21, 1885.

Levis' Flexible Metallic Splint for Fractures of the Forearm.—

This appliance is now being made by Mr. J. Ellwood Lee, of Conshohocken, Pa., under Dr. Levis' direction, of *perforated* nickel-plated metal, and in *two* sizes—for children as well as for adults. Mr. Lee is also getting up for Dr. Levis a *flexible joint-splint for the arm*, and will keep on getting out his splints until a complete set is placed on the market.

Dr. Lewis A. Sayre, we are glad to say, according to advice in a recent personal letter, is slowly improving in health and expects soon to be in full harness again. He has been pretty closely housed in his home, in New York city, nearly all of the past winter.

The Virginia State Board of Medical Examiners, at its approaching session at the Exchange Hotel, in this city, at 10 A. M., April 8, 1885, will examine some thirty or forty applicants for practice. As stated in our last issue, this will be a specially important meeting of the Board, and every member should make it a point to be present.

Obituary Record.

Dr. Henry G. Houston died at his home, in the city of Richmond, Va., on the night of March 16, 1885, in the thirtieth year of his age. He was born in Wheeling, W. Va., July 4, 1855. His death was not generally expected at this time, although his friends were aware that the seeds of the fatal lung trouble had taken root months ago. He was the son of the late Dr. M. H. Houston, of Wheeling, W. Va., who afterwards practised in Richmond, Va., and then was elected as Physician to Randolph Macon College, Va. During the latter part of the war Dr. Henry G. Houston resided in Rockbridge county, Va. At the age of seventeen years he went to California, where he remained five years. In 1877 he entered the Baltimore Medical College, from which institution he received his diploma as Doctor of Medicine during the spring of 1880. He then moved to Richmond, where he entered upon the practice of his profession. In 1883, associated with Dr. R. B. Stover, he established the *Atlantic Journal of Medicine*, of which a year later he became sole editor and proprietor. As a medical journalist he developed remarkable talents, and had succeeded in the brief space of two years in establishing his journal as one in the first rank of American periodical literature. The last regular number of the *Journal* was issued only a few days before his death. We have not heard what disposition will be made of the *Atlantic Journal of Medicine* by his executors. Dr. Houston joined the Medical Society of Virginia in 1882, and attended each of the subsequent meetings. He was an active member of the two local medical societies of Richmond, and contributed some reports and remarks to these societies which we fear are not preserved, as he intended at a future day to write them out for publication. He was the recipient of the honors of the local profession whenever it was in their power to bestow them. He was a man of merit and of bright prospects in the profession. In private life he was rather reserved as to conversations, but was warm-hearted and true in his friendships. His home circle was kept happy by his presence. In religion he was a Catholic, and the funeral services of his Church were conducted on March 18th, at St. Peter's Cathedral, in this city. In June, 1882, he married Miss Josephine Dooley, of this city—a sister of Major James H. Dooley—who, with a little daughter, survive him.

Dr. James Gray Thomas, born near Bloomfield, Ky., June 24, 1835, died while on an official visit to Washington, D. C., December 6, 1884, aged forty-nine years. He graduated in medicine from the University of the city of New York in 1856. He served as a Confederate Surgeon during the civil war. Afterwards he made Savannah, Ga., his home where he was residing at the time of his death. He served in the Georgia Legislature during the session of 1875-6, and was instrumental in securing the establishment of the Georgia State Board of Health, of which he became the first president. In 1877 he served as chairman of the Commission on Drainage, of Chatham county, Ga., and thus protect that State from yellow fever and other epidemic diseases. In 1882 he was made president of the Citizens' Sanitary Association of Savannah, in which office he continued until his death. He was a member of the American Health Association. He was taken ill with pneumonia on the cars near Richmond, Va., while *en route* to Washington to attend a meeting for the purpose of arranging for the International Medical Congress, to be held in that city in 1887. He was a great and good man, ever abounding in benefactions to those in need.

Dr. Thomas N. Reynolds, of Detroit, Mich., died while on a visit to San Antonio, Texas, March 14, 1885, in the forty-second year of his age. He was until recently Professor of Therapeutics, etc., in the Detroit Medical College. He held many prominent positions in his State. His health, however, failed him about a year ago, when he was compelled to give up practice and surrender professional pursuits. He was a native of Canada. He leaves two brothers in the profession—both of Detroit—Drs. Henry J. and Arthur R. Reynolds, both of whom occupy prominent positions in the profession of that city.

Dr. Lucas Alexander Dugas has recently died at his home, in Augusta, Ga., in the seventy-eighth year of his age. Dr. Dugas served several times as President of the Medical Association of Georgia, and from 1851 to 1858 he acted as editor of the *Southern Medical and Surgical Journal*. He will long be remembered in connection with *Dugas' sign* in dislocation of the shoulder.

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